COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF MONROE COUNTY WATER DISTRICT FOR RATE ADJUSTMENT PURSUANT TO 807 KAR 5:076	) CASE NO. 2017-00070

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of April 12, 2017, the attached report containing the findings of Commission Staff regarding the Applicant's proposed adjustment to its water service rates and non-recurring charges has been filed in the record of the above-style proceeding. Pursuant to the Commission's April 12, 2017 Order, Monroe County 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.

Talina R. Mathews

Talina R. Mathews
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATE JUN 30 2017

cc: Parties of Record

STAFF REPORT

ON

MONROE COUNTY WATER DISTRICT

CASE NO. 2017-00070

Monroe County Water District ("Monroe District") is a water district organized pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides water service to approximately 3,438 water customers located in the Monroe County, Kentucky.[1] On March 16, 2017, Monroe District filed an application ("Application") with the Commission pursuant to 807 KAR 5:076 requesting to increase its monthly water service rates evenly across the board by approximately 13.2 percent and to increase its non-recurring charges.

The requested water service rates would increase the monthly bill of a typical residential customer[2] from $34.51 to $39.07, an increase of $4.56, or 13.2 percent, and were designed to generate $225,312 in additional annual revenues, which Monroe District asserted was necessary to generate revenues from all sources that are equal to $2,025,478, its Overall Revenue Requirement. In the Application, Monroe District provided financial exhibits in support of the Overall Revenue Requirement and Required Revenue Increase as summarized below.

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[1] *Annual Report of Monroe County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2015* ("*Annual Report*") at 12 and 53.

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

Pro Forma Operating Expenses	$ 1,771,150
Add: Average Annual Debt Payments	211,940
Additional Working Capital	42,388
Overall Revenue Requirement	2,025,478
Less: Other Operating Revenue	(85,139)
Nonoperating Revenue	
Interest Income	(7,839)
Revenue Required from Rates	1,932,500
Less: Pro forma Present Rate Revenues	(1,707,188)
Revenue Increase	$ 225,312
Percentage Increase	13.20%

Monroe District's current non-recurring charges and the non-recurring charges it requested in the Application are compared below.

	Current	Requested	Increase $	Increase %
Tap-On Fees:				
5/8 x 3/4-Inch Meter	$ 550	$ 1,565	$ 1,015	185%
1-Inch Meter	Actual Cost	1,860		
2-Inch Meter	Actual Cost	5,180		
Deposits:				
5/8 x 3/4-Inch Meter	60	80	20	33%
1-Inch Meter	100	370	270	270%
2-Inch Meter	165	1,425	1,260	764%
Other:				
Connection / Turn-On Charge	40	90	50	125%
Connection / Turn-On Charge, After Hours	65	120	55	85%
Field Collection Charge	25	65	40	160%
Meter Relocation Charge	275	785	510	185%
Meter Re-Read Charge	25	65	40	160%
Meter Test Charge	50	115	65	130%
Reconnection Charge	50	135	85	170%
Reconnection Charge, After Hours	75	155	80	107%
Returned Check Charge	25	40	15	60%
Service Call Investigation Charge	25	80	55	220%
Service Call Investigation Charge, After Hours	50	105	55	110%
Service Line Inspection	50	95	45	90%

To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated April 12, 2017. This Order required that all motions to intervene be filed with the Commission no later than April 21, 2017, and it required Commission Staff ("Staff") to issue a report summarizing its findings after reviewing the Application and supporting documentation.

On March 27, 2017, the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("AG"), requested full intervention into this proceeding. The Commission granted the AG's request by Order dated April 10, 2017.

On May 19, 2017, Monroe District filed into the record of this proceeding a document titled First Supplement to Rate Application ("First Supplement") wherein Monroe District:

1) identified $3,376 as the amount of actual rate case expenses incurred as of the date of the filing of the First Supplement;
2) stated that it had refinanced certain long-term debt instruments subsequent to the filing of the Application;
3) included revised financial exhibits demonstrating that the aforementioned refinancing reduced its Overall Revenue Requirement as stated in the Application from $2,025,478 to $1,995,013 and reduced its Required Revenue Increase from $225,312 to $194,847;
4) stated that the amount of the Meter Test Charge requested in the Application, as shown in Tab 2, is stated incorrectly at $115 instead of $135, and that the average cost of meter tests shown on the cost justification worksheet included in the Application at Tab 35; and

5) included revised cost justification worksheets recalculating the average costs of the following non-recurring charges: [3]

	Current	Requested Application	Recalculated First Supplement
Tap-On Fees:			
5/8 x 3/4-Inch Meter	$ 550	$ 1,565	$ 1,375
1-Inch Meter	Actual Cost	1,860	1,635
2-Inch Meter	Actual Cost	5,180	4,990
Other:			
Connection / Turn-On Charge	40	90	85
Connection / Turn-On Charge, After Hours	65	120	100
Meter Relocation Charge	275	785	610
Reconnection Charge	50	135	125
Reconnection Charge, After Hours	75	155	140
Returned Check Charge	25	40	35
Service Call Investigation Charge	25	80	75
Service Call Investigation Charge, After Hours	50	105	95
Service Line Inspection	50	95	85

Although Monroe District recognizes that the long-term debt refinancing noted in the First Supplement reduces the amount of its Overall Revenue Requirement and Required Revenue Increase as stated in the Application, it did not request to amend the amount of the monthly water service rates requested in the Application. Similarly, Monroe District did not request to amend the nonrecurring charges requested in the Application to the amounts shown in the updated cost-justification worksheets provided in the First Supplement. Staff understands that Monroe District continues to seek the

[3] Monroe District states that the revised cost-justification worksheets reflect: "Elimination of the wages and benefits of the General Manager and Office Manager from average labor costs; Use of non-overtime wage rate for clerical personnel when calculating after-hours charges; and use of different methodology to calculate installation equipment expense" (*See* First Amendment, Attachment F, at 1). The "different methodology" referred to by Monroe District in the First Amendment consists of removing the boring machine's cost from the calculation of the cost of a short-side meter installation as shown in the Application (*See* Item 5 of Monroe District's May 19, 2017 Response to the Attorney General's Initial Data Request).

Commission's authorization to assess all of the rates it originally requested in the Application.

As required by 807 KAR 5:076, Section 3, Monroe District based its requested rates on the historic test year 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, 2015. Staff performed a limited financial review of Monroe District's test-year operations to gather the information necessary to determine the reasonableness of the rates requested in the Application and to prepare the report required by the Commission's April 12, 2017 Order.

The scope of the 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. Staff did not necessarily pursue or address discrepancies that it deemed insignificant and immaterial. Staff's findings are summarized in this report. Jack Scott Lawless reviewed the calculation of Monroe District's Overall Revenue Requirement. Jason Green reviewed Monroe District's reported revenues, rate design, and non-recurring charges.

Summary of Findings

1. Overall Revenue Requirement and Required Revenue Increase. By applying a Debt Service Method that is generally applied by the Commission, Staff found that Monroe District's Overall Revenue Requirement is $1,939,741 and that a revenue increase in the amount of $142,664, or 8.35 percent, is necessary to generate the Overall Revenue Requirement.

2. Monthly Water Service Rates. In the Application, Monroe District proposed to increase all of its monthly water service rates evenly across-the-board by approximately 13.2 percent. The Commission has previously found that the allocation of a revenue increase evenly across the board to a utility's current rate design is appropriate when there has been no evidence entered into the record demonstrating that this method is unreasonable. Finding no such evidence in this case, Staff followed the method proposed by Monroe District and allocated the $142,664 revenue increase Staff found warranted evenly across the board to Monroe District's current monthly water service rates.

Shown in Attachment A are the monthly water service rates calculated by Staff. These rates will increase a typical residential customer's monthly bill from $34.51 to $37.39, an increase of $2.88, or 8.35 percent.

3. Non-Recurring Charges. In the Application, Monroe District proposed to increase several of its non-recurring charges. It supported the requested charges with cost-justification worksheets provided in the Application. In the First Supplement, Monroe District revised many of these cost-justification worksheets without requesting to amend the amount of the non-recurring charges requested in the Application. After reviewing Monroe District's cost-justification worksheets provided in the Application and the First Supplement, Staff finds that following changes to Monroe District's non-recurring charges are reasonable.

	Current	Found Reasonable by Staff	Increase $	Increase %
Tap-On Fees:				
5/8 x 3/4-Inch Meter	$ 550	$ 1,375	$ 825	150%
1-Inch Meter	Actual Cost	1,635		
2-Inch Meter	Actual Cost	4,990		
Deposits:				
5/8 x 3/4-Inch Meter	60	80	20	33%
1-Inch Meter	100	370	270	270%
2-Inch Meter	165	1,425	1,260	764%
Other:				
Connection / Turn-On Charge	40	85	45	113%
Connection / Turn-On Charge, After Hours	65	100	35	54%
Field Collection Charge	25	65	40	160%
Meter Relocation Charge	275	610	335	122%
Meter Re-Read Charge	25	65	40	160%
Meter Test Charge	50	125	75	150%
Reconnection Charge	50	125	75	150%
Reconnection Charge, After Hours	75	140	65	87%
Returned Check Charge	25	35	10	40%
Service Call Investigation Charge	25	75	50	200%
Service Call Investigation Charge, After Hours	50	95	45	90%
Service Line Inspection	50	85	35	70%

4. Depreciable Lives. Beginning on page 17 of this report, Staff discusses Monroe District's depreciation practices. Staff found that adjustments are warranted to the depreciable lives that Monroe District used to calculate depreciation expense during the test year. If the Commission Orders any changes to Monroe District's depreciable lives for ratemaking and accounting purposes, Monroe District should ensure that it calculates and records depreciation expense in all future reporting periods in accordance with the Commission's Orders. Monroe District should not adjust accumulated depreciation or retained earnings to account for the retroactive cumulative effect of this change in accounting estimate.

Pro Forma Operating Statement

Monroe District's Pro Forma Operating Statement for the test year ended December 31, 2015, as determined by Staff, appears below.

	Test Year	Adjustment	(Ref.)	Pro Forma
Operating Revenues				
Sales of Water	$ 1,607,063	$ 30,504	(A)	
		(22,213)	(A)	
		92,375	(A)	$ 1,707,729
Miscellaneous Service Revenue	74,338		(B)	
		2,160	(C)	
		23,640	(D)	
		(18,629)	(E)	81,509
Total Operating Revenues	1,681,401	107,837		1,789,238
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	350,184	19,185	(F)	369,369
Salaries and Wages - Commissioners	6,000			6,000
Employee Pensions and Benefits	145,663	11,223	(F)	156,886
Purchased Water	511,628	101,389	(G)	
		(22,294)	(G)	590,723
Purchased Power:				
Pumping	49,778	(1,812)	(H)	47,966
Other	13,341			13,341
Materials and Supplies	99,872	(8,945)	(I)	90,927
Contractual Services	49,923	1,396	(J)	
		1,250	(K)	
		5,000	(L)	57,569
Transportation Expenses	18,197			18,197
Insurance	31,392	3,045	(M)	34,437
Bad Debt Expense	8,224			8,224
Regulatory Commission Expense		1,125	(N)	1,125
Miscellaneous Expense	25,433			25,433
Total Operation and Maintenance Expenses	1,309,635	110,562		1,420,197
Taxes Other Than Income	3,101			3,101
Depreciation	334,393	(50,681)	(O)	283,712
Total Operating Expenses	1,647,129	59,881		1,707,010
Net Operating Income	34,272	47,956		82,228
Interest Income	7,839			7,839
Income Available to Service Debt	$ 42,111	$ 47,956		$ 90,067

(A) Water Service Revenues. Monroe District provided a billing analysis showing the gallons of water billed to retail customers during the test year. Applying the water service rates that were in effect during the test year to the water sales shown in the billing analysis, Staff determined that a billing analysis adjustment is appropriate that increases test-year revenues by $30,504. Monroe District also included in its application an adjustment for leaks and misread meters that decreases test-period revenue by $22,213.

In Case No. 2016-00092, the Commission authorized Monroe District to increase its water rates in order to pass through the wholesale water rate increase of the city of Tompkinsville.[4] By applying the retail rates authorized by the Commission to the applicable water sales shown in the billing analysis provided in Monroe District's application, Staff determined that an adjustment of $92,375 should be made to increase test-year revenues.

(B) Monroe District's Proposed Adjustments to Reclassify Test-Year Revenues and Expenses. In the Application, Monroe District noted that it had reported certain test-year revenues and expenses using incorrect accounts. Monroe District proposed adjusts to revenues and expenses to correct these account misclassifications as follows:

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[4] *Purchased Water Adjustment Filing of Monroe County Water District* (Ky. PSC Mar. 18, 2016).

	Account Title	
Amount	Original Entry	Reclassification
$ 18,000	Other Water Revenue	Rents from Water Property
27,227	Employee Pensions and Benefits	Taxes Other Than Income
6,278	Purchased Power	Miscellaneous Expenses
6,167	Miscellaneous Expense	Water Testing

The reclassification adjustments proposed by Monroe District have no effect on the calculation of Monroe District's Overall Revenue Requirement or Required Revenue Increase. Further, given that Monroe District and Staff allocated the Required Revenue Increase evenly across the board to all of Monroe District's current monthly water service rates, the reclassification adjustments have no effect on the distribution of the Overall Revenue Requirement to Monroe District's current rate design. Therefore, Staff finds that the reclassification adjustments are not necessary. Staff did not record these adjustments on Monroe District's pro forma operating statement.

(C) Rents of Water Property. Pursuant to an agreement dated November 6, 2014, Monroe District leases space to Bluegrass Cellular ("Bluegrass") atop its water towers to which Bluegrass has mounted wireless communication equipment. As stated in the lease agreement, the lease payments received by Monroe District increased from $18,000 in 2015 to $20,160 in 2016, but did not increase in 2017. Monroe District proposed to increase test-year revenues by $2,160 to account for the change in lease revenue. Staff agrees with the proposed adjustment and has increased test-year revenue by $2,160.

(D) Increase in Revenue that will Result from Increases to Non-recurring Charges. In the Application, Monroe District proposed increases to many of its non-recurring charges. It determined that these increases, if approved by the Commission, would increase its test-year Other Operating Revenues by $27,260.[5] As previously discussed in this report, Staff found that adjustments are warranted to the non-recurring charges requested by Marion District. Staff determined that the non-recurring charges it found appropriate would increase Monroe District's test-year Other Operating Revenue by $23,640. Accordingly, Staff increased Monroe District's Other Operating Revenue by $23,640 to determine Monroe District's pro forma operations.

(E) Remove Insurance Reimbursement from Revenue. Monroe District included in Other Operating Revenue total payments of $18,629.31 from its property insurer for reimbursement of the costs to repair Monroe District's Highway 1049 pumping station. These payments have been removed. None of the repair costs are included in test-period expenses.

(F) Employee Wages and Wage Overheads. Monroe District calculated the following adjustments to test-year employee wage and wage overhead expenses to account for changes to employee wage rates and insurance premiums that occurred subsequent to the end of the test year and to account for the removal of the portion of

[5] Application, Tab 3, Attachment 1.

wages and wage overhead costs that Monroe District attributes to the construction of new meter installations.[6]

	Pro Forma	Remove Cost of Meter Installations	Less: Test Year	Adjustment to Expense Account
Employee Wages	$ 383,329	(13,960)	(350,184)	$ 19,185
Employee Pensions and Benefits:				
Payroll Taxes, 7.65 percent of Pro Forma Wages	$ 29,325	$ (1,082)	$ (27,227)	$ 1,016
Retirement Contributions, 8 percent of Pro Forma Wages	30,666		(26,775)	3,891
Single Health, Dental, and Life Insurance (Employee Pays 25 percent of Dental Premium)	102,550	(4,571)	(91,662)	6,317
Total Adjustment to Employee Pensions and Benefits	$ 162,540	$ (5,653)	$ (145,664)	$ 11,223

As shown above, Monroe District's adjustment includes $383,329 for total Pro Forma Salaries and Wages – Employees. This amount includes all employees' regular wages and overtime wages that Monroe District anticipates paying in pro forma operations. Monroe District calculated pro forma regular wages by multiplying each employee's current hourly wage rate to the 2,080 regular hours that each employee is anticipated to be paid in pro forma operations. Pro forma overtime wages were calculated by applying each employee's current overtime wage rate (one and one-half

[6] The actual adjustments made by Monroe District are detailed in the Application at Tab 3 where they are identified as Reference Items F, G, and Q, and are detailed on Reference Pages 2, 3, and 7, respectively. Note that Monroe District's adjustment to the Employee Pensions and Benefits account shown at Reference Item G on Page 3 omits the payroll taxes shown in Staff's summary of Monroe District's adjustments. Although Monroe District reported payroll taxes as an Employee Pension and Benefits expense during the test year, it reclassified payroll taxes to the Taxes Other Than Income account in pro forma operations. Consequently, Monroe District's adjustment to the Employee Pensions and Benefits account shown in the Application at Reference Item G includes only pension costs and insurance benefits. At Reference Item G, Monroe District calculated total pro forma pensions and insurance benefits to be $133,216 (See Application, Tab 3, Attachment 2). It then capitalized $4,571 of this cost that it attributed to new meter installations (See Application, Tab 3, Attachment 3) leaving the adjusted balance in pro forma Employee Pensions and Benefits expense at $128,645. Yet, without explanation, Monroe District requests rate recovery of $129,203 for Employee Pensions and Benefits Expense (See Application, Tab 3, Schedule of Adjusted Operations).

times their current regular wage rate) to the number of overtime hours that the employee worked during the test year.

To demonstrate that the pro forma wages calculated for each employee is stated at a level that is reasonable, Monroe District provided a comparison of each employee's pro forma wages to the average annual wages of employees of other water utilities with similar job titles that were reported in salary surveys conducted separately by the American Water Works Association and the Kentucky Rural Water Association.[7] Staff finds that the level of total pro forma wages calculated by Monroe District in the amount of $383,329 is reasonable and may be used as the basis for adjusting test-year wages expenses and wage overhead costs.

Further, Staff finds that the amount of Monroe District's adjustments to remove the cost of meter installations from pro forma wages and wage overhead costs result in the capitalization of the total cost of the meter installations, in all material respects, as estimated by Staff. Accordingly, Staff agrees with all of the adjustments proposed by Monroe District to employee wages and wage overhead costs and has included these adjustments in the calculation of Monroe District's pro forma operations.

Staff notes that, in its recent Orders, the Commission has made ratemaking adjustments to reduce the cost of employee-benefit packages paid by some utilities on behalf of their employees to levels that are more commensurate with those of other businesses. For example, in Case No. 2016-00325, the Commission found that North Mercer Water District ("North Mercer) paid, on behalf of its employees, 100 percent of the cost of family health insurance plans, family dental insurance plans, single dental

[7] Application, Tab 24.

insurance plans, and 100 percent of each employee's life insurance premium.[8] In that proceeding, the Commission excluded from rates 32 percent of the cost of the family health insurance plans[9] and it excluded from rates 60 percent of the cost of dental insurance plans.[10] It did not reduce the amount of life insurance premiums.

Likewise, in Case No. 2016-00367, the Commission removed, for ratemaking purposes, the cost of the Nolin Rural Electric Cooperative Corporation's ("Nolin") contributions to a 401(k) plan made on behalf of all employees who qualified and participated in the National Rural Electric Cooperative Association Retirement and Security Program ("NRECARSP"), which is a defined pension benefit plan.[11] The Commission did not remove the 401(k) contributions made by Nolin on behalf of its employees who had been employed longer than 30 years and, therefore, no longer qualified for participation in the NRECARSP. Also in that case, the Commission, finding that is was unreasonable for Nolin to provide 100 percent of the cost of health insurance coverage to employees, ordered that rate recovery by Nolin for the cost of family health insurance coverage be reduced by 32 percent and the rate recovery by Nolin for single health insurance coverage be reduced by 21 percent.[12]

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[8] *Electronic Application of North Mercer Water District for Rate Adjustment made Pursuant to 807 KAR 5:076* (Ky. PSC May 19, 2017) at 2.

[9] *Id.* at 3. The Commission found that the 32 percent reduction was reasonable based on information provided at Bureau of Labor Statistics, Healthcare Benefits, July 22, 2016, Table 4, private industry workers. (https://www.bls.gov/news.release/pdf/ebs2.pdf).

[10] *Id.* The Commission found that the 60 percent reduction rate was reasonable based on the Willis Benefits benchmarking Survey, 2015 (https://www.willis.com/documents/publications/Services/Employee_Benefits/20151230_2015WillisBenefitsBenchmarkingSurveyReport.pdf).

[11] *Application of Nolin Rural Electric Cooperative Corporation for a General Rate Increase* (Ky. PSC June 21, 2017) at 10.

[12] *Id.* at 11.

In this case, Staff found that Monroe District provides only one pension plan to its employees and that it pays 100 percent of the cost of each employee's single health insurance benefit and 75 percent of the cost of each employee's single dental insurance benefit. No family coverage for health insurance or dental insurance is provided by Monroe District. Staff did not make ratemaking adjustments to remove 21 percent of the cost of single health insurance coverage or make adjustments to reduce the cost of dental insurance by 60 percent, as was done by the Commission in the aforementioned cases of Nolin and North Mercer, respectively.

Staff finds that the reasonableness of the cost of an employee compensation package provided by any entity, regulated or not, should be evaluated in its totality recognizing that the combination of the individual components included in an employee benefit package often vary widely from one business entity to another. One entity may provide higher wages with limits on other benefits when compared to another entity that offers lower wages while providing better insurance coverages or retirement benefits to remain competitive for employee services. As a result, evaluating the level of one benefit of a compensation package in isolation, such as wages or health insurance, without giving consideration to the level of all other benefits included with the package is neither fair, just, nor reasonable.

Below, Staff provides a comparison of the average cost of wages and benefits per employee allowed for rate recovery by Staff for Monroe District in this proceeding to those allowed by the Commission in the cases of North Mercer and Nolin. As demonstrated in the comparison, the cost of Monroe District's compensation package allowed by Staff is less on a per-employee basis than the adjusted costs authorized by the Commission in the cases of North Mercer and Nolin. Staff finds that the cost of Monroe District's employee compensation package is reasonable and does not warrant adjustment.

	Monroe District	North Mercer	Nolin
Full-Time Employee Wages	$ 383,329	$ 393,558	$ 7,380,922
Insurances:			
Health	97,916	63,428	887,414
Dental	2,541	1,380	-
Life	2,088	3,288	80,619
Retirement Contribution	30,666	71,628	1,493,678
Total Compensation	516,540	533,282	9,842,633
Divide by: Number of Full-Time Employees	10	8	98
Average Compensation per Employee	$ 51,654	$ 66,660	$ 100,435
Retirement Contribution Rate Paid by Utility	8.00%	17.06%	25.28%

(G) Purchase Water. During the test year, Monroe District purchased all the water it distributed to its customers from the city of Tompkinsville. Monroe District reported $511,628 for test-year Purchased Water Expense. In the Application, Monroe District proposed two adjustments to the test-year amount. First, it increased the test-year amount by $101,389 to $613,017 to account for the increase to the wholesale water rate charged by the city of Tompkinsville from $1.85 per thousand gallons to $2.25 per thousand gallons that became effective on February 10, 2016.[13] Then, Monroe District reduced the $613,017 by $22,294 to remove the portion of the

[13] Application, Tab 3, References Page 4, Reference Item H. Monroe District's test-year water loss was 18.64 percent, or 3.64 percent more than that allowed for ratemaking purposes pursuant to 807 KAR 5:066, Section 6(3).

expense[14] that it attributed to excess water loss.[15] The resulting pro forma Purchased Water Expense is $590,723. Staff agrees with the adjustments proposed by Monroe District and has included them in the calculation of Monroe District's pro forma Purchased Water expense.

(H) Purchased Power for Pumping. During the test year, Monroe District reported Purchased Power for Pumping expense in the amount of $49,778. It proposed to reduce this amount by $1,812 to remove the test-year electrical cost incurred to pump water loss that was in excess of the allowable amount.[16] Staff agrees with the adjustment proposed by Monroe District and has made this adjustment to determine Monroe District's pro forma Purchased Power for Pumping expense.

(I) Removal of Expenses for Ratemaking Purposes. During the test year, Monroe District reported as Materials and Supplies expense $8,401 for expenditures related to its 40th Anniversary and Customer Appreciation celebration and $544 for employee gifts and donations. In the Application, Monroe District proposed to remove the cost of these items from test-year expenses for ratemaking purposes.[17] Staff agrees with the removal of these items and has reduced test-year Materials and Supplies expense by $8,945.

(J) Contracted Services – Meter Reading. Stephanie Young provides contracted meter reading services to Monroe District. Monroe District reported an

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[14] *Id.*

[15] *Id.*

[16] Application, Tab 3, References Page 4, Reference Item I.

[17] Application, Tab 3, References Page 5, Reference Item J.

expense in the amount of $41,823 for these services during the test year. In August of the test year, Ms. Young increased her fee from $1 per meter to $1.05 per meter. In the Application, Monroe District requested to increase the test-year expense by $1,396 to account for the $.05 increase to the meter reading charge.[18] Staff agrees with Monroe District's proposed adjustment and has increased test-year expenses by $1,396.

(K) Contracted Services – Reach Alert. Subsequent to the test year, Monroe District entered into a contract with Reach Alert, LLC, to provide Monroe District with a calling notification service. Using this service, Monroe District is able to notify its customers, employees, and Commissioners of events that require their immediate attention, such as boil-water advisories. The annual cost of this service is $1,250. Monroe District proposed to increase test-year expenses by $1,250 to include the cost of the contract in its pro forma operations.[19] Staff agrees and has increased test-year expenses by $1,250.

(L) Contracted Services – Audit Fees. During the test year, Monroe District paid its independent Certified Public Accountant ("CPA") $8,000 to examine its financial statements for the calendar year ended December 31, 2014, in accordance with Governmental Auditing Standards. This amount was reported as test-year contracted accounting expense. In the year 2017, the CPA increased the audit fee for the calendar year ended December 31, 2016, to $13,000. In the Application, Monroe District

[18] Application, Tab 3, References Page 5, Reference Item K.

[19] *Id.*

requested to increase the reported test-year contracted accounting expense by $5,000 to $13,000, the amount of the most recent audit fee.[20]

During its review, Staff questioned the reasonableness of the significant increase to the test-year audit fee. In response, the CPA stated that he had performed Monroe District's annual audit for the previous ten years and that the annual fee had remained at virtually the same level, around $8,000, in each of those years until this time when the audit fee was increased by $5,000 to $13,000. He continued by stating that consideration had been given over the previous years to smaller, more frequent increases to the audit fee, but those increases had been deferred until this time. He also noted that his actual cost for the 2016 financial statement audit exceeded $13,000, but that the amount of the fee charged to Monroe District was limited to the amount stated in the contract, $13,000.

If spread equally over the ten years that the CPA has performed Monroe District's audit, the $5,000 increase to the audit fee represents an average annual increase of $500 per year ($5,000 total increase/10 years), which Staff finds to be a reasonable amount. Staff accepts the adjustment proposed by Monroe District and has increased Monroe District's test-year expenses by $5,000.

(M) Insurance. Monroe District reported $31,392 for test-year Insurance Expense. This amount includes insurance premiums for Property, General Liability, Surety Bonds, and Workers Compensation. Monroe District first proposed to increase the test-year expense by $3,324 to $34,716 to account for increases to the premiums

[20] *Id.*

that occurred subsequent to the test year.[21] Monroe District then proposed to decrease Insurance Expense by $279 to capitalize the portion of Workers Compensation Insurance that Monroe District attributed to the construction of new meter installations.[22] The net increase to test-year Insurance Expense proposed by Monroe District is $3,045 ($3,324 - $279). Staff agrees with the adjustments proposed by Monroe District and has increased test-year Insurance Expense by $3,045.

(N) Amortization of Rate Case Expense. Monroe District contracted outside legal counsel to prepare, file, and defend the Application before the Commission. In the Application, Monroe District estimates that the cost of these services for which it seeks rate recovery will total $15,000. Monroe District proposed to increase test-year expenses by $5,000 to provide rate recovery of this amount over a three-year amortization period.

Staff finds that Monroe District should recover, over a three-year amortization period, all actual rate case expenses that are reasonable. At the time of Staff's review, Monroe District had incurred $3,376 (legal services, $2,500 + publication of notice, $876) for the preparation and filing of the Application. This amount appears to be a reasonable level of expense for the services provided and may be recovered by Monroe District through rates. Accordingly, Staff increased test-year expenses by $1,125 ($3,376 / 3) to amortize, over a three-year period, the actual rate case expense incurred as of the date of Staff's review.

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[21] Application, Tab 3, References, Page 6, Item M.

[22] Application, Tab 3, Attachment 3.

(O) Depreciation. Monroe District reported test-year depreciation expense in the amount of $334,394. It calculated this amount by applying a composite depreciation rate to each utility plant account group's audited original cost balances reported as of the beginning of the test year, January 1, 2015, except for the Transportation Equipment Account Group. This account group was fully depreciated at the beginning of the test year. However, a service truck, with a cost of $26,362, was placed into service on June 21, 2015. Monroe District recorded one-half-year depreciation in the amount of $1,634 for this truck during the test year calculated as follows: $26,362 Original Cost-Year Service Life x 1/2 Year. Monroe District then determined the Transportation Equipment Account Group's composite depreciation rate to be 0.8658 percent by dividing the truck's test-year depreciation by the Transportation Equipment Account Group's test-year beginning balance. This composite rate is shown on the depreciation schedule and does not convert to the eight-year life assigned to the new truck by simply dividing the composite rate into the number 1. Instead, it converts to 115.5 years (1 / composite rate, .008658). The 0.8658 percent composite depreciation rate shown on Monroe District's depreciation schedule is misleading. Monroe District did not depreciate the Transportation Equipment Account Group using a 115.5 year depreciable life.

The test-year depreciation expense for each account group recorded by Monroe District, and Staff's recalculation thereof, is detailed in the table below. Staff recognizes that the amount it recalculated for depreciation on all account groups is $170 higher than the test-year amount recorded by Monroe District. Staff considers this amount immaterial and believes that its recalculation, as shown below, is an accurate portrayal of the methods used by Monroe District to calculate and record test-year depreciation expense.

Depreciation Recorded for the Test Year, the Calendar Year Ended December 31, 2015

	Original Cost Plant Balance at 12/31/14 or 1/1/15	Composite Rate	Converted to Years (1 / Rate)	Depreciation Expense Recalculated by Staff	Depreciation Expense Recorded by Monroe
Land	$ 126,842				
Structures and Improvements	427,778	2.90%	34.48	$ 12,406	$ 12,406
Pumping Equipment	492,960	5.00%	20.00	24,648	24,729
Distribution Reservoirs	1,801,108	3.33%	30.03	59,977	59,921
Transmission and Distribution Main	8,638,559	2.01%	49.75	173,635	173,424
Services	120,774	3.30%	30.30	3,986	3,986
Meters and Installations	880,168	2.74%	36.50	24,117	24,131
Other Plant	32,370	3.30%	30.30	1,068	1,068
Furniture and Equipment	98,768				
Transportation Equipment	188,725	0.8658%	-	1,634	1,634
Power Operated Equipment	330,965	10.00%	10.00	33,097	33,097
Total	$ 13,139,017			$ 334,566	$ 334,396
Difference					$ 170

In the Application, Monroe District proposed to increase test-year depreciation by $8,671 to $343,064.[23] Monroe stated that the increase was "to reflect Monroe District's utility plant in service as of December 31, 2016."[24] This is not correct. As shown below, using the composite rates shown in the Application, Staff recalculates the amount Monroe District requests for rate recovery. Staff's recalculation demonstrates that Monroe District requests depreciation on each account group's balance reported at December 31, 2015, except for the Distribution Reservoir Account Group. Staff recognizes that the amount of depreciation it recalculated for all account groups below is $33 higher than the amount recorded by Monroe District. Staff considers this amount

[23] In support of the requested amount, Monroe District provided the "CAPITAL ASSET ROLLFORWARD" schedule shown at Tab 21 of the Application.

[24] Application, Tab 3, at 6 of 8, Reference Item O, Depreciation.

immaterial. Staff explains the method used by Monroe District to calculate depreciation for Distribution Reservoirs following the recalculation. Note that the composite rate shown below for Distribution Reservoirs is 3.75 percent, but is 3.33 percent in the recalculation of test-year depreciation expense shown above.

Depreciation Recorded for the Calendar Year Ended December 31, 2016

	Original Cost Plant Balance at 12/31/15	Composite Rate	Converted to Years (1 / Rate)	Depreciation Expense Recalculated by Staff	Depreciation Expense Recorded by Monroe
Land	$ 126,842				
Structures and Improvements	427,778	2.90%	34.48	$ 12,406	$ 12,406
Pumping Equipment	494,585	5.00%	20.00	24,729	24,729
Distribution Reservoirs	1,815,774	3.75%	26.67	68,092	68,133
Transmission and Distribution Main	8,671,180	2.01%	49.75	174,291	174,234
Services	120,774	3.30%	30.30	3,986	3,986
Meters and Installations	928,107	2.74%	36.50	25,430	25,411
Other Plant	32,370	3.30%	30.30	1,068	1,068
Furniture and Equipment	98,768				
Transportation Equipment	215,087				
Power Operated Equipment	330,965	10.00%	10.00	33,097	33,097
Total	$ 13,262,230			$ 343,097	$ 343,064
Difference					$ 33

The composite rate for Distribution Reservoirs, 3.75 percent, shown in the calculation above converts to 26.67 years (1 / 3.75 percent). The composite rate shown for this account group in Staff's recalculation of test-year depreciation expense, 3.33 percent, converts to 30.03 years (1 / 3.33 percent). Monroe District did not change the life for this account group from 30.03 years in 2015 to 26.67 years in 2016, as suggested on these schedules. Instead, Monroe District calculated depreciation expense for the year ended December 31, 2016, in the amount of $68,133, by first applying the 3.33 percent composite rate (30.03 year life) used during the test year to the account group's original cost at December 31, 2015. Monroe District then added to this sum one-half-year depreciation, calculated using the 30.03 year life, on the water storage tank that was placed into service during 2016 to replace an existing tank. Staff's recalculation of the 2016 depreciation expense for Distribution Reservoirs is shown below.

	Original Cost	Times: Composite Rate	Annual Depreciation	Times: One Half	2016 Depreciation
Original Cost at December 31, 2015	$ 1,815,774	3.33%	$ 60,465		$ 60,465
Less: Tank Removed from Service	(55,400)	3.33%	(1,845)		(1,845)
Add: Tank Placed into Service	607,282	3.33%	20,222	0.5	10,111
2016 Depreciation Recalculated					68,732
Less: Actual Depreciation Recorded by Monroe District					(68,133)
Difference					$ 598.70
Percentage Difference					-0.88%

Staff finds that the original cost of plant upon which Monroe District calculated pro forma depreciation is appropriate. These costs include Monroe District's investment in plant in service as of the end of the test year with the addition of the distribution reservoir that was placed into service during 2016 and the subtraction of the tank that was removed from service. Depreciation is the only operating expense that the new tank will affect in a material manner. Pumping costs will not increase significantly, since it is a replacement tank. Revenues will not be affected, since no customers were added to the distribution system as a result of the project. Monroe District's debt service payments will not be affected, since the project was funded with grant proceeds provided by the United States Environmental Protection Agency that Monroe District will not repay.

Staff disagrees with the depreciable lives used by Monroe District to calculate pro forma depreciation. Generally, the Commission requires that a "large" utility perform a depreciation study to determine the appropriate depreciable lives to be assigned to each of its utility plant account groups. Detailed property records specific to historic plant additions, plant retirements, and salvage practices are required to complete a depreciation study. Generally, "small" water utilities, such as Monroe District, do not maintain property records with enough detail to properly complete a formal study. Even when adequate records are maintained, "small" utilities do not have the financial resources to fund a formal study. Therefore, to evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the report published in 1979 by the National Association of Regulatory Utility Commissioners ("NARUC") titled Depreciation Practices for Small Water Utilities ("NARUC Study").[25]

The NARUC Study provides a range of average service lives that are assigned to water plant account groups by water utilities across the county that design, install, and maintain their systems in accordance with good engineering practices. It concludes that the ranges are intended to be used as a guide by state regulatory commissions and other water utilities when developing the depreciable lives to be assigned to water plant account groups. For example, the NARUC Study found that transmission and distribution mains are depreciated between 50 and 75 years. Lives outside the NARUC ranges are acceptable when conditions warrant alternative lives.

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[25] Case No. 2012-00278, *Application of Graves County Water District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Sept. 5, 2012).

When evaluating a water district's depreciable lives, the Commission considers an asset group's construction materials, condition, and other factors to determine an appropriate depreciable life that falls either inside or outside of the NARUC ranges. The Commission has assigned lives at the short end and long end of the NARUC ranges when evidence is presented to support such lives. For example, in Case No. 2012-00309,[26] the Commission found that Southern Water and Sewer District's ("Southern") mains should be depreciated using a 50-year life, the shortest life within the NARUC range, because the majority of its main had decayed at a more rapid rate than originally anticipated. In Case No. 2012-00413, the Commission accepted Staff's finding that the depreciable life assigned to Pendleton County Water District's mains should be 75 years because they were thought to be free of noticeable decay and in excellent condition.[27]

When no evidence exists to support a specific life that is inside or outside the NARUC ranges, the Commission has used the mid-point of the NARUC ranges to depreciate utility plant. In Case No. 2013-00154, the Commission found that Henderson County Water District ("Henderson District") was depreciating the cost of some main using a 40-year life and others using a 50-year life. Even though the 50-year life is within the NARUC range, the Commission found that the depreciable life assigned to all of Henderson District's mains should be 62.5 years, the mid-point of the

[26] *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC July 12, 2013).

[27] *Application of Pendleton County Water District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 20, 2012) at 8.

NARUC range, since no evidence was presented to support the 40-year or 50-year lives.[28]

Staff previously addressed Monroe District's depreciable lives in its report issued on November 3, 2011, in Case No. 2011-00272.[29] In its report, citing the NARUC Study, Staff found that Monroe District's depreciation should be calculated using the lives that are shown below. The NARUC Study's life ranges are also shown. Note that, except for Transmission and Distribution Main, the depreciable life used by Staff for each account group is either equal to the mid-point of the NARUC range, or very near the mid-point.

	Life Years	
Account Group	Staff	NARUC
Structures and Improvements	38	35-40
Pumping Equipment	20	20
Distribution Reservoirs	45	30-60
Transmission and Distribution Main	50	50-75
Services	40	30-50
Meters and Installations	40	35-50
Other Plant	35	30-40
Furniture and Equipment	23	20-25
Transportation Equipment	7	7
Power Operated Equipment	13	10-15

In Case No. 2011-00272, the Commission ordered that "[t]he findings and recommendations contained in the Commission Staff's report are adopted and incorporated by reference into this Order as if fully set out herein."[30] Although the

[28] *Application of Henderson County Water District for an Alternative Rate Filing* (Ky. PSC Nov. 14, 2013) at Appendix B.

[29] *Application of the Monroe County Water District for the Approval of the Proposed Increase in Rates for Water Service.*

[30] Case No. 2011-272, Monroe County Water District (Ky. PSC Dec. 1, 2011) at 5.

Commission accepted the depreciable lives used by Staff for ratemaking purposes, neither the Commission nor Staff instructed Monroe District to use those depreciable lives for accounting purposes in future reporting periods. In the Application filed in this proceeding, Monroe District did not use the lives found appropriate by the Commission for ratemaking purposes in Case No. 2011-00272. It stated that the lives used to calculate depreciation in this proceeding "are within range of average service lives found in Depreciation Practices for Small Water Utilities (NARUC AUG. 15, 1979) and are generally consistent with the service lives that the Public Service Commission Staff recommended in Case No. 2011-00272 and that the Public Service Commission subsequently accepted."[31]

Shown below is a comparison of the lives approved by the Commission in Case No. 2011-00272, the lives proposed by Monroe District in the Application, and the life ranges shown in the NARUC Study.

	Life Years		
Account Group	Commission Case No. 2011-00272	Monroe District Application	NARUC
Structures and Improvements	38	34.48	35-40
Pumping Equipment	20	20.00	20
Distribution Reservoirs	45	30.03	30-60
Transmission and Distribution Main	50	49.75	50-75
Services	40	30.30	30-50
Meters and Installations	40	36.50	35-50
Other Plant	35	30.30	30-40
Furniture and Equipment	23	-	20-25
Transportation Equipment	7	8.00	7
Power Operated Equipment	13	10.00	10-15

[31] Application, Tab 6, Additional Notes Regarding Application, Page 1, Reference Item C., Depreciation.

The comparison above demonstrates that Monroe District has proposed to move the depreciable lives previously authorized by the Commission in Case No. 2011-00272 for all account groups to the short end of the NARUC range except for Transmission and Distribution Mains and Transportation Equipment. Monroe District supported the depreciable lives proposed in the Application with an affidavit from Robert D. Stigall, Monroe District's contracted engineer. In the affidavit, Mr. Stigall states that:

> Based upon my training and experience as a professional engineer, my personal knowledge of the design and construction of Monroe District's facilities and its operations and maintenance practices, and my experience with similar water distribution facilities in Kentucky and Tennessee and taking into account the climate, soil conditions, and topography of the region in which Monroe District is situated, I am of the opinion that these service lives are appropriate, reasonable and accurately reflect the probable service lives of Monroe District's facilities.[32]

Staff disagrees with the depreciable lives proposed in the Application and finds that all account groups should be depreciated using the lives that were approved by the Commission in Case No. 2011-00272 except for Transmission and District Mains. Staff finds that Transmission and Distribution Mains should also be depreciated using the NARUC midpoint, 62.5 years.

Staff's findings are based on its discussion with Monroe District's General Manager ("GM"), an employee who has been involved with the operation and maintenance of Monroe District's plant in service for approximately 19 years and, as a result, has extensive knowledge of the plant's physical condition. During Staff's discussion, the GM stated that the plant's overall condition was average for its age and

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[32] Application, Tab 22, at 3.

that no component of the plant exhibits excessive or accelerated decay. Specific to the mains, the GM stated that approximately 95 percent are constructed of polyvinyl chloride, the remaining are iron, and he stated that all main are in satisfactory condition with no major replacements being anticipated for many years.

Finding no evidence in this proceeding to indicate that Monroe District's plant in service should be depreciated using depreciable lives that vary significantly from the NARUC mid points, Staff adjusted test-year depreciation expense using the depreciable lives previously approved by the Commission in Case No. 2011-00272, except for Transmission and Distribution Mains. Staff depreciated mains using 62.5 years. As a result, Staff decreased test-year depreciation by $50,681 as calculated below.

	Depreciable Basis at 12/31/15	Additions	Retirements	Adjusted Basis	Divide by: Life Year	Pro Forma Depreciation Expense
Land	$ 126,842			$ 126,842		
Structures and Improvements	427,778			427,778	38	$ 11,257
Pumping Equipment	494,585			494,585	20	24,729
Distribution Reservoirs	1,815,774	$607,282	$ (55,400)	2,367,656	45	52,615
Transmission and Distribution Main	8,671,180			8,671,180	62.5	138,739
Services	120,774			120,774	40	3,019
Meters and Installations	928,107			928,107	40	23,203
Other Plant	32,370			32,370	35	925
Furniture and Equipment	-			-		
Transportation Equipment	26,362			26,362	7	3,766
Power Operated Equipment	330,965			330,965	13	25,459
Total	$ 12,974,737	$607,282	$ (55,400)	$ 13,399,777		283,712
Less: Test Year						(334,393)
Adjustment						$ (50,681)

Note that the decrease to test-year depreciation expense resulting from Staff's proposed depreciable lives does not deny rate recovery of any portion of the cost of Monroe District's plant in service. These lives simply extend the period of time over which the plant's cost are recovered through rates when compared to the depreciable lives requested by Monroe District.

Overall Revenue Requirement and Required Revenue Increase

The Commission has historically applied a Debt Service Coverage ("DSC") method to calculate the Overall Revenue Requirement of a water district or water association that has outstanding long-term debts. This method allows for recovery of: 1) cash related pro forma operating expenses; 2) depreciation expense, a non-cash operating expense, to provide working capital;[33] 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 Monroe District's and Staff's calculation of Monroe District's Overall Revenue Requirement and Required Revenue Increase using the Commission's DSC method is shown below.

[33] 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 to be used 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).

	Monroe District Application	Monroe District First Supplement	Staff	Ref.
Pro Forma Operating Expenses	$1,771,150	$ 1,771,150	$1,707,010	
Add: Average Annual Debt Payments	211,940	186,553	193,942	(1)
Additional Working Capital	42,388	37,311	38,788	(2)
Overall Revenue Requirement	2,025,478	1,995,014	1,939,741	
Less: Other Operating Revenue	(85,139)	(85,139)	(81,509)	
Interest Income	(7,839)	(7,839)	(7,839)	
Revenue Required from Rates	1,932,500	1,902,036	1,850,393	
Less: Pro forma Present Rate Revenues	(1,707,188)	(1,707,188)	(1,707,729)	
Revenue Increase	$ 225,312	$ 194,848	$ 142,664	
Percentage Increase	13.20%	11.41%	8.35%	

(1) Average Annual Principal and Interest Payments. At test-year end, Monroe District had eight outstanding bond series payable to the United States Department of Agriculture Rural Development ("RD"); Series 1978, 1987, 1990, 1992, 1994, 1998, 1999, and 2003. In the Application, Monroe District requested to include $211,940, in the calculation of its Overall Revenue Requirement to recover the three-year average of the principal and interest payments coming due on all RD bonds beginning January 1, 2017.

In Case No. 2017-00058, the Commission authorized Monroe District to enter into a Lease Agreement with the Kentucky Association of Counties Finance Corporation ("KACOCF") the proceeds from which would be used to refinance all of the RD Bonds except Series 1999.[34] On May 9, 2017, Monroe District received the lease funds and

[34] *Application of Monroe County Water District for Approval to Enter into a Lease Agreement with the Kentucky Association of Counties Leasing Trust in an Approximate Principal Amount of $2,175,000 for the Purpose of Refinancing Certain Outstanding Obligations of the Monroe County Water District* (Ky. PSC Mar. 22, 2017).

retired the RD Bonds. Interest accruing from May 9, 2017, to June 30, 2017, is payable to KACOCF on July 1, 2017. The first full principal and interest payment to KACOCF becomes due six months later on January 1, 2018.

In the First Supplement, Monroe District determined that the refinancing would reduce the three-year average debt payments beginning with the year 2017 from $211,940 to $186,553, a $25,387 reduction.

To account for the full effect of the retirement of the RD Bonds and the assumption of the KACOCF lease, Staff finds that the average annual debt payment to be included in the calculation of Monroe District's Overall Revenue Requirement should begin with the debt payments coming due on and after January 1, 2018, calculated as follows:

	Principal and Interest Payments			
	2018	2019	2020	Total
KACOCF	$190,944	$173,494	$171,194	$535,631
RD	15,179	15,406	15,609	46,195
Three-Year Total				581,826
Divide by: Three Years				3
Annual Average Payment				$193,942

(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 this case, Monroe District calculated its allowance for additional

working capital to be $42,388. Staff calculated the allowance for additional working capital to be $38,788 following the Commission's traditional method as shown below.[35]

Average Annual Principal and Interest Payments	$ 193,942
Times: DSC Ratio	120%
Total Net Revenues Required	232,730
Less: Average Annual Principal and Interest Payments	(193,942)
Additional Working Capital	$ 38,788

[35] The 1999 RD Bond resolution requires that Monroe District assess rates for water service that produce net revenues that are equal to at least 120 percent of the average annual RD bond principal and interest payments as well as all principal and interest payments on any debts that are on par with the RD bond. The DSC ratio measures an entity's ability to pay its cash related operating expenses and to pay debt principal and interest. RD calculates the ratio by dividing net revenues by the entity's average annual debt payments. Net revenues are equal to total revenues less cash related expenses. Depreciation expense, a noncash operating expense, is excluded from the determination of net revenues. As shown below, the required DSC ratio is met with or without including the additional working capital in the calculation of Monroe District's Overall Revenue Requirement. Note that the Operation and Maintenance Expense stated below includes the purchased water and purchased power cost for excess water loss that was eliminated for ratemaking purposes.

	With Additional Working Capital	Without Additional Working Capital
Overall Revenue Requirement	$ 1,939,741	$ 1,900,952
Less: Operation and Maintenance Expense	(1,444,303)	(1,444,303)
Taxes Other Than Income	(3,101)	(3,101)
Net Revenues	492,336	453,548
Divide by: Average Annual Debt Payments	193,942	193,942
DSC Ratio	253.86%	233.86%

Signatures

Prepared by: Jack Scott Lawless, CPA
Water and Sewer Branch
Division of Financial Analysis

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

ATTACHMENT A
STAFF REPORT, CASE NO. 2017-00070
MONROE COUNTY WATER DISTRICT

Monthly Water Rates

5/8-Inch X 3/4-Inch Meters	
First 2,000 Gallons	$20.51 Minimum Bill
Next 3,000 Gallons	8.44 Per 1,000 Gallons
Next 5,000 Gallons	7.14 Per 1,000 Gallons
Over 10,000 Gallons	6.17 Per 1,000 Gallons
1-Inch Meters	
First 5,000 Gallons	$45.83 Minimum Bill
Next 5,000 Gallons	7.14 Per 1,000 Gallons
Over 10,000 Gallons	6.17 Per 1,000 Gallons
2-Inch Meters	
First 20,000 Gallons	$143.84 Minimum Bill
Over 20,000 Gallons	6.17 Per 1,000 Gallons
Wholesale Water Rate	$3.25 Per 1,000 Gallons

Non-Recurring Charges

Meter Connection/Tap-On Charge	
5/8-Inch X 3/4-Inch Meter	$1,375.00
1-Inch Meter	1,635.00
2-Inch Meter	4,990.00
Connection/Turn-on Charge	85.00
Connection/Turn-on Charge (After Hours)	100.00
Deposit	
5/8-Inch X 3/4-Inch Meter	80.00
1-Inch Meter	370.00
2-Inch Meter	1,425.00
Field Collection Charge	65.00
Meter Re-Read Charge	65.00
Meter Relocation Charge	610.00
Meter Testing Charge	125.00
Reconnection Charge	125.00
Reconnection Charge (After Hours)	140.00
Returned Check Charge	35.00
Service Call/Investigation Charge	75.00
Service Call/Investigation Charge (After Hours)	95.00
Service Line Inspection Charge	85.00

*Gerald E Wuetcher
Attorney at Law
STOLL KEENON OGDEN PLLC
300 West Vine Street
Suite 2100
Lexington, KENTUCKY 40507-1801

*Monroe County Water District
205 Capp Harlan Road
Tompkinsville, KY 42167

*Jana Dupree
Monroe County Water District
205 Capp Harlan Road
Tompkinsville, KY 42167

*Richard O Ross
General Manager
Monroe County Water District
205 Capp Harlan Road
Tompkinsville, KY 42167

*S. Morgan Faulkner
Office of the Attorney General Office of Rate
700 Capitol Avenue
Suite 20
Frankfort, KENTUCKY 40601-8204