

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE ADJUSTMENT FILING) CASE NO.
OF MARION COUNTY WATER DISTRICT) 2016-00163

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of May 19, 2016, the attached report containing the findings of Commission Staff ("Staff") regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's May 19, 2016 Order, Marion 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
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATED AUG 11 2016

cc: Parties of Record

STAFF REPORT
 ON
 MARION COUNTY WATER DISTRICT
 CASE NO. 2016-000163

Marion County Water District (“Marion 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 5,900 retail customers in Marion County and Nelson County, Kentucky.¹ Its current monthly water service rates are shown in the table below:

<u>Customer Charges</u>	
<u>Meter Size</u>	<u>Monthly Charge</u>
5/8- x 3/4-Inch	\$ 7.23
1-Inch	15.70
2-Inch	24.90
3-Inch	39.49
4-Inch	62.63
6-Inch	157.52
 <u>Water Charge</u> 	
\$5.47 per thousand gallons	

On May 12, 2016, the Commission accepted for filing Marion District’s application (“Application”) to increase its current water service rates pursuant to 807 KAR 5:076. A comparison of Marion District’s current and proposed rates is shown in the table below:

¹ Annual Report of Marion County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2015 (“2015 Annual Report”) at 12 and 53.

<u>Customer Charge</u>	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>Increase</u>	<u>Percentage Increase</u>
5/8- x 3/4-Inch Meter	\$ 7.23	\$ 7.83	\$ 0.60	8.30%
1-Inch Meter	15.70	17.00	1.30	8.28%
2-Inch Meter	24.90	26.94	2.04	8.19%
3-Inch Meter	39.49	42.75	3.26	8.26%
4-Inch Meter	62.63	67.81	5.18	8.27%
6-Inch Meter	157.52	170.12	12.60	8.00%
<u>Water Charge</u>				
Per Thousand Gallons	5.47	6.20	0.73	13.35%

In the Application, Marion District stated that the proposed rates would increase the monthly bill of a typical residential customer² by \$3.52, from \$29.11 to \$32.63, a 12.09 percent increase.³ It presented a billing analysis in the Application that demonstrates the proposed rates will generate \$307,911 in additional annual revenues, a 12.3 percent revenue increase.⁴

In the Application, Marion District stated that the proposed rates were based on the historical test year that coincides with the reporting period shown in its *2015 Annual*

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

³ Application, Customer Notice.

⁴ Application, ARF form 1 – Attachment BA-FR.

Pro Forma Proposed Rate Revenue	\$ 2,811,476
Less: Pro Forma Present Rate Revenue	<u>(2,503,565)</u>
Increase	<u>307,911</u>
Percentage Increase	<u>12.30%</u>

Report on file with the Commission at the time Marion District filed the Application as required by 807 KAR 5:076, Section 9, the calendar year ending December 31, 2015.

To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated May 19, 2016. That Order required Commission Staff ("Staff") to prepare and file into the record a written report summarizing its findings regarding the reasonableness of Marion District's proposed rates.

To evaluate the reasonableness of the proposed rates, Staff performed a limited financial review of Marion 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. 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 Marion District's Overall Revenue Requirement. Eddie Beavers reviewed Marion 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 the Marion District's Overall Revenue Requirement is \$2,747,867, and that a \$78,913, or 3.15 percent, revenue increase to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. Water Service Rates. Marion County's Application proposes to increase its rates using a percentage increase for its customer charges and water charge. The percentage increase for the customer charges as stated in the Customer Notice filed with the Application is an 8.0 percent increase to the current customer charge rates and the percentage increase to the water charge as stated in the Customer Notice was a 13.0 percent increase to the current water charge. Marion County provided no supporting information as to the varying percentage increases of its rates.

The rates set forth in Attachment A to this report are based upon the revenue requirement as calculated by Commission Staff and will produce sufficient revenues from water sales to recover the \$2,582,467 determined by Staff, an approximate 3.15 percent increase. The Commission has previously found that an across-the-board increase is an appropriate and equitable method of cost allocation in the absence of a cost-of-service study. Staff finds that an across-the-board increase is the appropriate means to allocate the increased revenue requirement.

These rates will increase a typical residential customer's monthly water bill for 4,000 gallons of usage from \$29.11 to \$30.50, an increase of \$0.94, or 3.2 percent.

3. Depreciable Lives. In this proceeding, Staff reviewed the depreciable lives that Marion District has currently assigned to the asset groups shown in the plant ledger that was included as part of the Application. Staff's review and findings of the depreciable lives are summarized in this report beginning on page 27 at Ref. Item (E). As shown there, Staff adjusted the depreciable lives assigned to Transmission and Distribution Mains to 62.5 years for ratemaking purposes. If the Commission approves this life for ratemaking purposes, Marion District should be required to use this life to

calculate depreciation on Mains for accounting purposes in all future reporting periods. No adjustment to accumulated depreciation or retained earnings should be made to account for the effect of this change in accounting estimate.

Pro Forma Operating Statements

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

	<u>Test Year</u>	<u>Adjustments</u>	<u>(Ref.)</u>	<u>Pro Forma</u>
Operating Revenues				
Water Sales Revenue	\$ 2,485,829	\$ 17,736	(A)	\$2,503,565
Other Operating Revenue	122,222			122,222
Total Operating Revenues	2,608,051	17,736		2,625,787
Operating Expenses				
Operation and Maintenance				
Salaries and Wages - Employees	252,523			252,523
Salaries and Wages - Officers	41,104			41,104
Employee Pensions and Benefits	82,127		(B)	
		16,339	(C)	98,466
Purchased Water	1,459,693			1,459,693
Purchased Power	39,339			39,339
Materials and Supplies	145,947		(D)	145,947
Contractual Services	36,199			36,199
Transportation Expenses	28,603			28,603
Insurance	29,602			29,602
Bad Debt	5,409			5,409
Miscellaneous	23,849			23,849
Total Operation and Maintenance	2,144,395	16,339		2,160,734
Depreciation	452,189	(66,141)	(E)	386,048
Taxes Other Than Income	26,782			26,782
Total Operating Expenses	2,623,366	(49,802)		2,573,564
Net Operating Income	(15,315)	67,538		52,223
Interest Income	3,704			3,704
Nonutility Income	39,463			39,463
Income Available to Service Debt	\$ 27,852	\$ 67,538		\$ 95,390

(A) Billing Analysis Adjustment. Marion County provided a billing analysis with its application that determined normalized test-year revenues from water sales to be in the amount of \$2,503,565 for all customers. The billing analysis was produced from test-year customer data from the utility's billing software. Marion County's billing analysis provided in the application normalized test-year water revenues, adjusting for test-year customer sales data resulting in an increase to water sales revenues of \$17,736, as reported in the *2015 Annual Report*.

(B) Test-Year Employee Payroll Taxes Double Counted in Application. In its General Ledger and *2015 Annual Report*, Marion District reported test-year Employee Pensions and Benefits expense in the amount \$82,127 and Taxes Other Than Income expense in the amount of \$26,783. The amounts reported to these accounts can be separated into the following subsidiary accounts:

Insurance Benefits	\$ 49,513
County Employee Retirement System ("CERS")	<u>32,614</u>
Total Employee Pension and Benefits	<u>\$ 82,127</u>
State Regulatory Commission Fee	\$ 5,098
Payroll Taxes	<u>21,684</u>
Total Taxes Other Than Income	<u>\$ 26,782</u>

In the Application, Marion District stated test-year Employee Pensions and Benefits expense at \$103,811 and Taxes Other Than Income expense at \$26,684. It did not explain why the amount reported for Employee Pensions and Benefits expense in the Application is \$21,684 higher than the amount reported to this account in the

2015 Annual Report. It appears that Marion District inadvertently included Payroll Taxes in both expense accounts in the Application as demonstrated below:

Insurance Benefits	\$ 49,513
County Employee Retirement System ("CERS")	32,614
Payroll Taxes	<u>21,684</u>
Total Employee Pension and Benefits	<u>\$ 103,811</u>
State Regulatory Commission Fee	\$ 5,098
Payroll Taxes	<u>21,684</u>
Total Taxes Other Than Income	<u>\$ 26,782</u>

In its report, Staff stated test-year Employee Pension and Benefits expense at the correct amount, \$82,127.

(C) Accounting for the Implementation of Governmental Accounting Standards Board ("GASB") Statement No. 68 ("GASB 68") Accounting and Financial Reporting for Pensions. Marion District participates in the County Employee Retirement System ("CERS") that is part of the Kentucky Retirement Systems. As a result of its participation, Marion District reported test-year pension expense in the amount of \$32,614. In the Application, it proposed to increase this amount by \$126,250 to account for the effects in pro forma operations of implementing GASB 68 during the test year.

Staff finds that the test-year amount should be increased by \$16,339 to set pro forma pension expense equal to \$48,953, the amount of Marion District's test-year contributions to CERS. Staff further finds that Marion District should report as a

regulatory asset in accordance with GASB 62⁵ the effect of GASB 68's initial implementation as well as GASB 68's effect on future reporting periods.

Staff's findings are supported in the discussion that follows. This discussion includes an analysis of the effects of GASB 68 on Marion District's financial statements and the reasonableness of rate recovery of pension costs reported pursuant to GASB 68. This is the first case in which the Commission will determine the reasonableness of a water district's rate recovery of pension costs reported in accordance with GASB 68.

CERS

Like many other water districts that are regulated by the Commission, Marion District participates in CERS.⁶ As a participating member of CERS, all of Marion District's qualifying employees are eligible to receive post-retirement benefits that include pension payments and health insurance coverage.

⁵ GASB 62, paragraph 480, states:

Rate actions of a regulator can provide a business-type activity with reasonable assurance of the existence of an asset. A regulated business-type activity should capitalize all or part of an incurred cost that otherwise would be charged to expense is both of the following criteria are met:

a. It is probable that future revenue in an amount at least equal to the capitalized cost will result from inclusion of that cost in allowable costs for rate-making purposes.

b. Based on available evidence, the future revenue will be provided to permit recovery of the previously incurred cost rather than to provide for expected levels of similar future costs. If the revenue will be provided through an automatic rate-adjustment clause, this criterion requires that the regulator's intent clearly be to permit recovery of the previously incurred cost.

⁶ CERS is a cost-sharing plan wherein the post-retirement obligations to the employees of more than one employer are pooled and the plan's assets can be used to pay the benefits of the employees of any participating employer.

The level of benefits awarded to CERS participating employees after retirement depends on their job classification as either hazardous or nonhazardous during their employment and the date upon which they began participating in CERS. All employees who began participation prior to September 1, 2008, are considered TIER 1. TIER 2 includes employees who began participation on or after September 1, 2008, but before January 1, 2014. TIER 3 includes employees who began participation on or after January 1, 2014.⁷

CERS is funded by contributions from participating employees and their employers. The employee and employer contribution rates are stated as a percentage of the employee's monthly wages. The employee's contribution rate is dependent on his or her job classification as either hazardous or nonhazardous and his or her TIER. The employer's contribution rate depends only on the employee's job classification as either hazardous or nonhazardous, and no consideration is given to the employee's corresponding TIER. The employer contribution rate is established using an actuarial evaluation and is generally adjusted annually beginning July 1 of each fiscal year.⁸ The employer contribution rates for the previous five years are shown below:

⁷ For a comparison of the retirement benefits of each TIER level go to <https://kyret.ky.gov/employees/Documents/KRS%20Benefit%20Tier%20Comparison.pdf>.

⁸ See KRS 61.565.

Fiscal Year Beginning July 1,	Employer Contribution Rate
2012	18.96%
2013	19.55%
2014	18.89%
2015	17.67%
2016	17.06%

Accounting Requirements for Water District Pension Costs

A water district, such as Marion District, being a political subdivision of the Commonwealth of Kentucky that was created by a fiscal court, must report its financial transactions, including those for pensions, in accordance with accounting standards established by GASB.

GASB Statement No. 27 ("GASB 27")

For all annual reporting periods beginning prior to June 15, 2014, a water district participating in CERS reported pension costs in accordance with GASB 27. GASB 27 required employers participating in a cost-sharing pension plan to recognize annual pension expense on its Statement of Revenues, Expenses, and Changes in Fund Net Position ("Income Statement") in an amount that was equal to its contractually required contributions to the plan during the reporting period. A liability was recognized on the participants Statement of Financial Position ("Balance Sheet") for any contractually required contributions that had not been paid as of the Balance Sheet date.

During the test year, Marion District paid all amounts that it was contractually required to contribute to CERS. Pursuant to GASB 27, Marion District's test-year CERS pension expense would have been equal to \$48,953, its test-year contributions. It would not have reported a liability.

GASB 68

In June 2012, GASB released GASB 68 radically changing the reporting requirements for pension costs of CERS participants for reporting periods beginning after June 15, 2014. For water districts participating in CERS, the effects of GASB 68 must first be reported on its financial statements for the calendar year ended December 31, 2015.

For financial reporting purposes, GASB 68 requires that an employer participating in a Cost-Sharing Pension Plan recognize on its Balance Sheet its proportionate share of the plan's Net Pension Liability ("NPL") and any deferred

outflows of resources and deferred inflows of resources⁹ related to pensions. The participating employer's proportionate share of CERS's NPL must be measured as of a date ("measurement date") that is no earlier than the end of the employer's prior fiscal year. For example, the measurement date must be after December 31, 2014, for

⁹ GASB Concepts Statement No. 4 defines a deferred outflow of resources as the consumption of net assets that is applicable to a future reporting period (See paragraph 32). A deferred inflow of resources is defined as an acquisition of net assets that is applicable to a future reporting period. (See paragraph 34). GASB Statement No. 63 requires that deferred outflows of resources be presented in the Balance Sheet in a separate section following assets and that deferred inflows of resources be reported in a separate section following liabilities. The deferred amounts may be added to assets and liabilities to provide subtotals on the Statement of Financial Position (See paragraph 7). GASB 68 identifies the five items listed below that can result in either a deferred outflow or a deferred inflow that must be recognized in the financial statements of participants in cost-sharing pension plans. GASB 68 requires that each of these deferred outflows and inflows be amortized and included in the calculation of the participant's annual pension expense using a systematic and rational manner. Amortization of a deferred outflow increases annual pension expense. Amortization of a deferred inflow decreases pension expense. Except for Item No. 5 shown below, which must be amortized over five years, each deferred item must be amortized using the Average Remaining Service Lives ("ARSL") of all active and inactive employees participating in the pension plan. Amortization of all items is required to begin in the Current Reporting Period ("CRP").

Item	GASB 68 Paragraph Reference	Deferred Outflow / Deferred Inflow	Amortization	Amortization
			Period	Period Begins
1	54	Change in Proportionate Share of NPL	ARSL	CRP
2	55	Difference Between the Employer's Contributions and the Employer's Proportionate Share of the Contributions	ARSL	CRP
3	71.a.(1)	Differences Between Expected and Actual Experience with Regard to Economic and Demographic Factors	ARSL	CRP
4	71.a.(2)	Changes of Assumptions About Future Economic or Demographic Factors	ARSL	CRP
5	71.b	Difference Between Projected and Actual Investment Earnings	5 Years	CRP

GASB 68 states that contributions to the pension plan from the employer subsequent to the measurement date of the collective net pension liability and before the end of the employer's reporting period should be reported as a deferred outflow of resources related to pensions. (See paragraph 57). These deferred outflows will be recognized as a reduction to the participating employer's proportionate share of the NPL in the reporting period immediately following the period in which they originate.

reporting periods ending December 31, 2015, Marion District's test year. GASB 68 requires that the employer's proportionate share of the NPL be determined using a basis that is consistent with the manner in which contributions to the pension plan are determined.¹⁰

CERS's NPL is determined by subtracting the pension plan's Fiduciary Net Position ("FNP"), which is essentially the fair value of the plan's assets, from its Total Pension Liability ("TPL"). GASB 68 requires that the TPL be determined by an actuarial valuation as of the measurement date or the use of update procedures to roll forward to the measurement date amounts from an actuarial valuation as of a date that is not more than 30 months and one day earlier than the employer's most recent fiscal year end.¹¹

The pension expense reported on a CERS participant's Income Statement pursuant to GASB 68 includes:

- 1) the employer's contributions to the plan during the reporting period that occurs prior to the NPL's measurement date;
- 2) the amortization of the employer's proportionate share of deferred outflows of resources and deferred inflows of resources related to pensions;
- 3) the employer's proportionate share of the plan's actuarially determined annual pension expense; and
- 4) the employer's allocated proportionate share of the change in the net pension liability from one reporting period to the next.

¹⁰ GASB 68, paragraph 48.

¹¹ *Id.*, paragraph 60.

Actuarial Valuations of CERS

Kentucky Retirement Systems contracted Cavanaugh Macdonald Consulting, LLC, (“CMC”) to perform actuarial valuations of CERS’s FNP, TPL, NPL, annual pension expense, deferred outflows of resources, and deferred inflows of resources for the fiscal years ended June 30, 2014, and June 30, 2015. CMC summarized its findings for the year ended June 30, 2014, in a report dated March 13, 2015 (“CMC 2014 Report”). Its findings for the year ended June 30, 2015, are summarized in a report dated March 4, 2014 (“CMC 2015 Report”). In both reports, collectively referred to hereinafter as the “CMC Reports,” CMC allocated CERS’s FNP, TPL, NPL, annual pension expense, deferred outflows, and deferred inflows to each CERS participating employer based on the employer’s share of the total employer contributions made to CERS during the fiscal year.¹²

A comparison of CMC’s actuarial valuations of CERS’s nonhazardous TPL, FNP, NPL, Deferred Inflows, and Deferred Outflows for each fiscal year end is shown below

¹² Staff notes that the employer contribution allocation factors for the fiscal year ended June 30, 2014, were determined using all of an employer’s annual contributions to CERS; however, the allocation factors for the fiscal year ended June 30, 2015, were determined using only the portion of the employer’s CERS contributions that were attributed to pension benefits. The portion attributed to CERS’s post-retirement health care benefits is not included. This is demonstrated in the table below using the information shown in the CMC Reports for Marion District.

<u>Fiscal Year Ended</u>	<u>Marion District's Actual CERS Contributions</u>	<u>CERS Contributions Used for Allocation in the Schedules and Disclosures</u>	<u>Percentage of Actual Used for Allocation</u>
June 30, 2014	\$ 50,384	\$ 50,250	100%
June 30, 2015	49,032	35,456	72%

with Marion District's proportionate share. Note that the total TPL and NPL increased by approximately \$1 billion from June 30, 2014, to June 30, 2015.

TPL, FNP, NPL, Deferred Inflows of Resources, and Deferred Outflows of Resources				
	June 30, 2014		June 30, 2015	
	Total	Marion's Share	Total	Marion's Share
TPL	\$9,772,522,616	Not Stated	\$10,740,325,421	Not Stated
FNP	(6,528,146,353)	"	(6,440,799,856)	"
NPL	3,244,376,263	\$376,000	4,299,525,565	\$ 516,583
FNP as a percentage of TPL	66.80%		59.97%	
Deferred Outflows			507,832,474	71,839
Deferred Inflows	362,151,000	42,000		

A comparison of CMC's calculation of CERS's Nonhazardous annual pension expense, and Marion District's proportionate share thereof, for each fiscal year is shown below:

Calculation of Net Pension Expense				
	June 30, 2014		June 30, 2015	
	Total	Marion's Share	Total	Marion's Share
Service Cost	\$ 192,482,000	Not Stated	\$ 207,399,891	Not Stated
Interest on TPL and Cash Flow	710,526,000	"	733,002,238	"
Expensed Portion of Current-Period Difference between Expected and Actual Experience in the TPL			14,235,300	"
Expensed Portion of Current-Period Changes to Assumptions			172,733,108	"
Member Contributions	(128,568,000)	"	(140,310,824)	"
Projected Earnings	(442,842,000)	"	(498,262,162)	"
Expensed Portion of Current Period Differences Between Actual and Projected Earnings on Plan Investments	(90,538,000)	"	77,538,869	"
Administrative Expense	18,615,000	"	18,212,642	"
Other			(10,280,391)	"
Recognition of Beginning Deferred Inflows of Resources as Pension Expense			(90,537,903)	"
Pension Expense	\$ 259,675,000	\$ 30,000	\$ 483,730,768	\$ 62,432

Note that, as highlighted in gray above, \$172,733,108, or 35.7 percent, of the total pension expense in the amount of \$483,730,768 is attributed to changes made to assumptions. From review of the CMC Reports, Staff could not identify all of the assumptions that were made in each of the CMC Reports or which assumptions were changed when preparing the CMC 2015 Report; however, in the table below, Staff provides a comparison of many of the major assumptions made in each report.

	Report Date, Table Includes Assumptions for Nonhazardous Only	
	March 13, 2015	March 4, 2016
Annual Inflation	3.50%	3.25%
Salary Increases	4.50%	4.00%
Annual Discount Rate	7.75%	7.50%
Annual Return on Investments	7.75%	7.50%
Mortality Table	Not Stated	RP-2000
Annual Rates of Disability	Not Stated	.02% - .49% Dependent on Age Between 20 and 60 Years
Annual Rates of Retirement	Not Stated	5% - 100% Dependent on Age Between 55 and 75 Years
Annual Rate of Withdrawal	Not Stated	28% - 3% Dependent on Years of Service Between 0 and Over 14 Years
Percent Married	100.00%	Same
Form of Payment	Not Stated	"Life-Only"
Asset Valuation Method	Not Stated	"Five-Year Market Related Actuarial Value"
Actuarial Cost Method	"Entry Age Normal Cost Method"	"Entry Age Normal, Level Percentage of Pay Actuarial Cost Method"

CMC warned that significant fluctuations in actuarial valuations may occur. Although CMC stated that the actuarial valuations for the fiscal year ended June 30, 2014, "are based on the current provisions of the System, and on actuarial assumptions that are . . . reasonably based on the actual experience of the System,"¹³ it cautioned that "[f]uture actuarial results may differ significantly" from the current results presented in the CMC 2014 Report due to factors such as "plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or

¹³ CMC 2014 Report at 1.

demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used from these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law."¹⁴

After completion of each CMC Report, Kentucky Retirement Systems prepared financial schedules and financial note disclosures ("Schedules and Disclosures") for the fiscal year ended June 30, 2014 ("2014 Schedules and Disclosures"), and the fiscal year ended June 30, 2015 ("2015 Schedules and Disclosures"), in accordance with accounting principles that are generally accepted in the United States of America. The Schedules and Disclosures include CERS's total NPL, total deferred outflows of resources, total deferred inflows of resources, and total pension expense at the fiscal years' end as well as the allocation of these items to each participating CERS employer using factors that are based on the employer's share of the total employer contributions made to CERS during each fiscal year.

Staff noted no material differences in the financial information provided in the 2014 Schedules and Disclosures when compared to the CMC 2014 Report. There are differences in the amounts shown in the CMC 2015 Report and the 2015 Schedules and Disclosures for each employer's total annual contributions to CERS; the percentage of each employer's share of the total annual employer contributions; the amounts reported for deferred outflows of resources; and the amounts reported as deferred inflows of resources. There is no explanation for these differences in the Statements and

¹⁴ *Id.* at 2.

Disclosures. The differences and their impact on Marion District are summarized in Attachment B.

The accounting firm of Dean Dorton Allen Ford, PLLC (“DDAF”) audited the 2014 Schedules and Disclosures and the 2015 Schedules and Disclosures and issued audit reports summarizing their findings on September 10, 2015 (“DDAF 2014 Report”), and May 16, 2016 (“DDAF 2015 Report”), respectively. In the reports, DDAF stated that, in its opinion, the Schedules and Disclosures “present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the...CERS Pension Funds . . . in accordance with accounting principles generally accepted in the United States of America.”¹⁵

The table below shows the issuance dates of the CMC Reports and the DDAF Reports. It demonstrates significant time elapsed between CERS's fiscal year ends and the completion of each report.

<u>Fiscal Year Ended</u>	<u>Issuance Date</u>	
	<u>CMC Actuarial Report</u>	<u>DDAF Audit Report</u>
June 30, 2014	Mar. 13, 2015	Sept. 10, 2015
June 30, 2015	Mar. 4, 2016	May 16, 2016

¹⁵ DDAF, Report of Independent Auditors dated September 10, 2015, at 2, and DDAF, Report of Independent Auditors dated May 16, 2016, at 2.

The information included in the audited Statements and Disclosures are in conformity with Generally Accepted Accounting Principles and are, therefore, the documents upon which a water district should rely to account for the effects of GASB 68.

Marion District's Reporting of GASB 68 Pension Costs for Accounting Purposes

To ensure the timely completion of its financial statement audit for the year ended December 31, 2015, Marion District used the information provided in the audited 2014 Statements and Disclosures to account for the implementation of GASB 68, anticipating that the DDAF 2015 Report would suffer the same lengthy delay as the DDAF 2014 Report. The journal entries made by Marion District to implement GASB 68 are shown below.

	Debit	Credit
Net Position Beginning Balance / Retained Earnings	\$366,435	
Deferred Outflows (Pension Contributions from 7/1/14 to 12/31/14)	21,565	
Pension Expense (from 2014 Schedules and Disclosures)	30,000	
Deferred Inflows (from 2014 Schedules and Disclosures)		\$42,000
Net Pension Liability at 6/30/14 (from Schedules and Disclosures)		376,000
To record Net Pension Liability in Accordance with GASB 68.		
Deferred Outflows	46,339	
Pension Expense		46,339
To reclassify 2015 Employer Pension Contributions.		

The table below shows the effects of the journal entries on Marion District's test-year Pension Expense; Deferred Outflows of Resources; Deferred Inflows of Resources; Unappropriated Retained Earnings Before Contributions; and Long-Term Debt. Note that Pension Expense decreased to \$32,614.

	Account Balances		Increase/(Decrease)	
	Prior to Entries	Subsequent to Entries	\$	%
Pension Expense	\$ 48,953	\$ 32,614	\$ (16,339)	-33.38%
Deferred Outflows	-	67,904	67,904	-
Deferred Inflows	-	42,000	42,000	-
Unappropriated Retained Earnings Before Contributions	1,093,211	726,776	(366,435)	-33.52%
Long-Term Debt	2,514,837	2,890,837	376,000	14.95%

Staff's Review of Marion District's Reporting of GASB 68 Pension Costs

Staff finds that Marion District's reporting of \$376,000 in its December 31, 2015 financial statements as its proportionate share of the CERS Nonhazardous NPL is in violation of the requirements of GASB 68. As previously discussed, the NPL shown for a reporting period must be measured on a date that is no earlier than the end of the participating employer's prior fiscal year, in this case December 31, 2014. The \$376,000 was measured on June 30, 2014, or six months prior to December 31, 2014.

GASB 68, paragraph 60, permits use of the June 30, 2014 information, but only if procedures are applied to "roll forward" the TPL to a proper measurement date. Professional judgement must be used to determine the extent of the procedures used for the "roll forward." After the TPL is rolled forward to a proper measurement date, the FNP determined on that date is subtracted from the TPL to determine the NPL. A "roll forward" requires many complicated calculations that would likely require the assistance of an actuary.

Staff finds that Marion District should properly implement GASB 68 using the information provided in the 2015 Schedules and Disclosures. Accordingly, Marion

District should reverse all previous journal entries made to implement GASB 68 and record the journal entries that follow:

Entry No.

	<u>Dr.</u>	<u>Cr.</u>
1. Retained Earnings	\$ 358,052	
NPL		\$ 358,052

To record NPL at 1/1/2015. NPL determined by deducting from the NPL at 6/30/2014 the CERS contributions made between 6/30/2014 to 12/31/2014 that are attributed to pensions.

Calculation of NPL at 1/31/2015

NPL at 6/30/2014	\$ 376,000
Less: \$24,928 x 72 percent	<u>(17,948)</u>
NPL at 1/1/2015	<u>\$ 358,052</u>

	<u>Dr.</u>	<u>Cr.</u>
2. Difference Between Expected and Actual Experience	\$ 4,243	
Difference Between Projected and Actual Earnings		
on Investments	4,577	
Changes of Assumptions	51,488	
Change in Proportionate Share of NPL as of 6/30/2014	7,229	
NPL		\$ 67,537

To record Deferred Outflows shown in 2015 Schedules and Disclosures.

	<u>Dr.</u>	<u>Cr.</u>
3. Deferred Out Flow	\$ 17,892	
Pension Expense		\$ 17,892

To record, as a Deferred Outflow, the amount of CERS contributions made after the 6/30/2015 Measurement Date that are attributed to Pensions.

The CERS contributions attributed to health care costs are not included.

Calculation of Amount Deferred

Total Contributions	\$ 24,850
Times: 72 percent attributed to Pensions	<u>72%</u>
Amount to Deferred	<u>\$ 17,892</u>

	<u>Dr.</u>	<u>Cr.</u>
4. Pension Expense	\$ 18,853	
Difference Between Expected and Actual Experience		\$ 1,209
Difference Between Projected and Actual Earnings on Investments		915
Changes of Assumptions		14,669
Change in Proportionate Share of NPL as of 6/30/2014		2,060

To record Amortization of Deferred Outflows beginning in the CRP.
The 3.51 ARSL was taken from page 13 of CMC 2015 Report.

Calculation of Amount to Amortization Annually

<u>Outflow</u>	<u>Divide by:</u>	<u>Amortization</u>
\$ 4,243	3.51	\$ 1,209
4,577	5.00	915
51,488	3.51	14,669
7,229	3.51	2,060
<u>\$ 67,537</u>		<u>\$ 18,853</u>

	<u>Dr.</u>	<u>Cr.</u>
5. Pension Expense	\$ 60,326	
NPL		\$ 60,326

To record Marion District's proportionate share of pension expense
stated in 2015 Statements and Disclosures.

	<u>Dr.</u>	<u>Cr.</u>
6. Pension Expense	\$ 24,677	
NPL		\$ 24,677

To adjust NPL to amount shown in 2015 Schedules and Disclosures.

The effects of the journal entries on Marion District's financial statements are summarized in the table below:

	Pension Expense	Balance Sheet Accounts		
		Deferred Outflow	NPL	Retained Earnings
Effect of GASB 68 at 12/31/2014	\$ -	\$ -	\$ -	\$ -
	<u>Entry No.</u>			
	1.		358,052	(358,052)
	2.	67,537	67,537	
	3.	(17,892)	17,892	
	4.	18,853	(18,853)	
	5.	60,326	60,326	
	6.	24,677	24,677	
Effect of GASB 68 at 12/31/2015 Increase/(Decrease)	<u>\$ 85,964</u>	<u>\$ 66,576</u>	<u>\$ 510,592</u>	
Effect on Retained Earnings of Increase to Pension Expense				<u>(85,964)</u>
Effect of GASB 68 at 12/31/2015 Increase/(Decrease)				<u>\$ (444,016)</u>

Marion District's total test-year pension expense using the 2015 Schedules and Disclosures is \$134,917,¹⁶ or \$102,303 higher than the \$32,614 test-year expense reported by Marion District using the 2014 Schedules and Disclosures.

Marion District's Proposed Ratemaking Treatment of GASB 68 Pension Costs

After accounting for the effects of GASB 68, Marion District's test-year pension expense is stated at \$32,614. In the Application, Marion District proposed a ratemaking

¹⁶

Test-Year Contributions to CERS	\$ 48,953
GASB 68 Pension Expense	<u>85,964</u>
Total	<u>\$ 134,917</u>

adjustment to increase test-year pension expense by \$126,250 based on the actuarial valuation shown in the CMC 2015 Report, which was completed prior to Marion District's filing of the Application. Marion District did not provide the calculation of its adjustment in the Application; however, the calculation was provided to Staff during its review and is summarized below.

Total CERS Nonhazardous NPL from CMC 2015 Report for Fiscal Year Ended June 30, 2015	\$ 4,299,525,000
Times: Marion District's Proportionate Share of CERS Employer Contributions for the Fiscal Year End June 30, 2014	<u>0.011595%</u>
Marion District's Allocated Share of June 30, 2015 NPL	498,530
Less: NPL Reported by Marion District to Account for the Implementation of GASB 68	<u>(376,000)</u>
Pro Forma Pension Expense Due to Increase in NPL	122,530
Plus: Deferred Outflows that Marion District Recorded to Account for the Implementation of GASB 68 which will be Reclassified to Pension Expense in the Reporting Period Immediately Following the Year of Implementation	44,734
Less: Amortization of Deferred Inflows Reported by Marion District to Account for the Implementation of GASB 68	<u>(8,400)</u>
Pro Forma Pension Expense	158,864
Less: Test-Year Pension Expense	<u>(32,614)</u>
Increase	<u>\$ 126,250</u>

Staff's Ratemaking Treatment of GASB 68 Pension Costs

Since the passage of GASB 68 in June 2012, Staff has had numerous discussions with water district representatives including, but not limited to, Commissioners, General Managers, Office Managers, accountants, and auditors. They

all expressed concerns regarding the effect of GASB 68 on a water district's financial statements. Most notably, there is concern that the additional liability shown on the Balance Sheet and corresponding reduction to equity will reduce a water district's bond rating and, in turn, increase future interest costs and limit its access to loan funds. They also expressed concern that the level of annual pension expense will fluctuate wildly because of its dependence on the actuarial assumptions and changes to the pension fund's FNP. These concerns are warranted.

As shown in Staff's analysis, implementation of GASB 68 increased Marion District's long-term debts at the end of the test year by 20 percent and decreased its unappropriated retained earnings by 41 percent.¹⁷ Furthermore, Marion District's pension expense fluctuated greatly depending on the Schedules and Disclosures from which it was determined. Using the 2014 Schedules and Disclosures, Marion District determined its annual pension expense was \$32,614. Using the actuarial valuation from one year later shown in the 2015 Schedules and Disclosures, Staff calculated Marion District's annual pension expense to be \$134,917.

To mitigate the impact of GASB 68 on Marion District's Balance Sheet and to smooth the level of annual pension expense that will be reported by Marion District from year to year, Staff finds that Marion District should be allowed to recover an amount of pension expense through rates that is equal to its test-year contributions to CERS and

17

	<u>Account Balances</u>		<u>Increase/(Decrease)</u>	
	<u>Prior to Entries</u>	<u>Subsequent to Entries</u>	<u>\$</u>	<u>%</u>
Long-Term Debt	\$ 2,514,837	\$ 3,025,429	\$ 510,592	20%
Unappropriated Retained Earnings	1,093,211	649,195	(444,016)	-41%

to reclassify, as a regulatory asset in accordance with GASB 62, all amounts recorded to account for the implementation of GASB 68. The reclassification journal entry is shown below followed by a table demonstrating the effects of the entry on each account balance at the end of the test year.

	<u>Dr.</u>	<u>Cr.</u>
Regulatory Asset	\$ 510,592	
Pension Expense		\$ 85,964
Deferred Outflow		66,576
Retained Earnings		358,052

To record the effects of GASB 68 as a Regulatory Asset.

	Pension Expense	<u>Balance Sheet Accounts</u>			
	<u>Regulatory Asset</u>	<u>Deferred Outflow</u>	<u>NPL</u>	<u>Retained Earnings</u>	
Effect of GASB 68 at 12/31/2015					
Before Reclassification Entry	\$ 85,964		\$ 66,576	\$ 510,592	(358,052)
Reclassification Entry	(85,964)	\$ 510,592	(66,576)		358,052
Effect of GASB 68 at 12/31/2015					
After Reclassification Entry	<u>\$ (0)</u>	<u>\$ 510,592</u>	<u>\$ 0</u>	<u>\$ 510,592</u>	<u>\$ 0</u>

As shown above, accounting for the effects of GASB 68 as a regulatory asset strengthens Marion District's financial position. Retained Earnings is restated to its original balance and the NPL is offset by the addition of the regulatory asset. Also, pension expense is stated at the amount of Marion District's contributions to CERS, \$48,953. The level of future contributions is expected to remain fairly constant since recent history shows that CERS makes only subtle adjustments to its contribution rate.

In each future reporting period, Marion District's annual pension expense that is calculated and recorded pursuant to GASB 68 should be compared to the contributions made in that reporting period. In periods when the GASB 68 expense exceeds contributions, pension expense should be credited and the regulatory asset should be

debited for the excessive amount. Conversely, in periods when the GASB 68 expense is less than annual contributions, the difference should be debited to pension expense and credited to regulatory assets. Also, future deferred outflows and deferred inflows related to pensions should be reclassified to the regulatory asset. As a result of this accounting method, the balance of the regulatory asset should mirror the balance of the NPL. Eventually, when the CERS pension liability becomes fully funded, the balance of Marion District's NPL and the regulatory asset will be zero and Marion District will have recovered through rates its contributions to CERS.

(D) Materials and Supplies. During the test year, Marion District reported test-year materials and supplies expense in the amount of \$145,947. In the Application, Marion District requested to increase this amount by \$42,500 to recover the estimated cost of replacing water main at a major the creek crossing and two secondary creek crossings that it planned to complete subsequent to the filing of the Application.

At the time of Staff's review, Marion District had completed the main replacement at the major creek crossing and one of the secondary crossings. The total cost of these projects was \$42,905. Because these projects had been completed at the time of Staff's review, their costs are known and measurable and may be recovered through the rates authorized in this proceeding. However, their total costs should not be added to Materials and Supplies Expense and recovered annually through rates as requested by Marion District. These main installations are an asset that will benefit more than one accounting period. Their costs should be capitalized and depreciated over the main's estimated useful lives. This method of accounting, and ratemaking treatment, systematical spreads the cost of the mains over the period of time that they benefit

Marion District's customers, and it allows Marion District rate recovery of their costs over this same time period. Accordingly, Staff included their costs in calculation of Marion District's pro forma depreciation expense as shown below in Ref. Item (E).

(E) Depreciation. Marion District reported test-year depreciation expense in the amount of \$389,022. It calculated this amount using the whole-life, straight-line method, pursuant to which an asset's depreciable basis is divided by its estimated useful life. Staff finds that the test-year amount should be decreased by \$66,141 to account for adjusting the depreciable lives currently assigned to Transmission and Distribution Mains ("Mains") from 40 and 50 years to 62.5 years and to account for the additional depreciation resulting from the main replacements capitalized by Staff above in Ref. Item (D). The calculation of Staff's adjustment is shown below followed by a discussion of Staff's adjustment to the depreciable lives assigned to mains.

Depreciable Basis in Mains as Stated in 12/31/2015 Plant Ledger	\$12,245,513
Add: Main Replacement at Creek Crossings	<u>42,905</u>
Adjusted Basis	12,288,418
Divided by: Estimate Useful Life	<u>62.5</u>
Pro Forma Depreciation to Accrue on Mains	196,615
Less: Test Year	<u>(262,756)</u>
Decrease	<u>\$ (66,141)</u>

Generally, the Commission requires a "large" utility to 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 Marion District, do not maintain property records with enough detail to properly complete a formal study. Even if adequate records were 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”)*.¹⁸

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 the Mains are depreciated between 50 and 75 years. Lives outside the NARUC ranges are acceptable when conditions warrant alternative lives.

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 within 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. 2012-00309,¹⁹ the

¹⁸ 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).

¹⁹ 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 July 12, 2013).

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. In that case, Southern stated in its application that the majority, approximately 65 percent, of its mains were constructed of asbestos cement and were installed in the 1960s and 1970s. Southern explained that its mains had deteriorated more rapidly than expected and were close to the end of their useful lives due to their close proximity to major construction projects and roadways and due to the high pressures necessary to move water over the extreme elevation changes that exist throughout its service territory. It stated that this deterioration is evident by its excessive water loss,²⁰ which was 44.35 percent.²¹ The Commission determined that these conditions warranted the 50-year life.

In Case No. 2012-00413, the Commission accepted²² Staff's finding that the depreciable life assigned to Pendleton County Water District's ("Pendleton") Mains should be 75 years. Staff supported its position by noting that Pendleton's mains were constructed of PVC and ductile iron; materials that are very durable and can maintain their structural integrity for more than 100 years. Staff continued by stating that Pendleton's mains were thought to be free of material decay and that this assessment was supported by Pendleton's low water-loss percentage.²³

²⁰ *Id.*, Application, Attachment C, at 19–20.

²¹ *Id.* at 13.

²² Case No. 2012-00413, *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), Final Order at 8.

²³ *Id.*, Commission Staff Report (filed Oct. 29, 2012) at 10.

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 NARUC range, since no evidence was presented to support a 50-year life.²⁴

In this proceeding, Staff found no evidence to suggest that any of Marion District's asset account groups should be depreciated using lives that vary significantly from the mid-point of the NARUC ranges. Generally, the lives that Marion District has assigned to each asset account group, except for Mains, are close enough to the mid-point that adjustments to the mid-point would not have a material effect on Marion District's test-year depreciation expense. During the test year, Marion District depreciated some mains using 40 years and others using 50 years. Adjusting these lives to the NARUC mid-point, or 62.5 years, has a material effect on test-year depreciation and is reasonable.

Note that during review of Marion District's plant ledger, Staff found that from 2009 to 2015 Marion District added a total of \$1,180,945 to the Meters and Meter Installations account group and that this amount is depreciated using a 20-year life. The vast majority of these additions are for Marion District's conversion to an automated metering system. Although the 20-year life falls outside the 35- to 50-year NARUC

²⁴ Case No. 2013-00154, *Application of Henderson County Water District for an Alternative Rate Filing* (Ky. PSC Nov. 14, 2013), Final Order, Appendix B.

range for Meters and Meter Installations, it is consistent with prior Commission Orders in which automated water metering systems were depreciated using a 20-year life.²⁵ Staff finds that the 20-year life is acceptable for the 2009 to 2015 additions.

Overall Revenue Requirement and Required Revenue Increase

The Commission has historically applied a DSC method to calculate the Overall Revenue Requirement of a water district or a water association that has outstanding long-term indebtedness. The method generally accepted by the Commission allows for recovery of: 1) cash-related pro forma operating expenses; 2) recovery of depreciation expense, a non-cash item, to provide working capital;²⁶ 3) the average annual principal and interest payments on all long-term debts; and 4) working capital that is in addition to depreciation expense.

Marion District applied the Commission's DSC method to calculate its revenue requirement. Staff agrees that application of this method is consistent with the general practice of the Commission and has also applied this method to calculate Marion District's Overall Revenue Requirement. A comparison of Marion District's and Staff's

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 September 5, 2012). See Staff Report issued on August 8, 2012, Attachment A at 9.

²⁶ 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 also, 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).

calculation of the Marion District's Overall Revenue Requirement and Required Revenue Increase using the Commission's DSC method is shown below:

	Marion District	Staff
Pro Forma Operating Expenses	\$2,813,800	\$2,573,564
Plus: Average Annual Debt Payment	144,771	145,253
Additional Working Capital	17,373	29,051
Overall Revenue Requirement	2,975,944	2,747,867
Less: Other Operating Revenue	(122,222)	(122,222)
Interest Income	(3,704)	(3,704)
Non-Operating Revenue	(39,463)	(39,463)
Revenue Required from Rates	2,810,555	2,582,478
Less: Pro Forma Revenue from Present Rates	(2,485,829)	(2,503,565)
Required Revenue Increase	<u>\$ 324,726</u>	<u>\$ 78,913</u>
Percent Increase	<u>13.06%</u>	<u>3.15%</u>

(1) Average Annual Principal and Interest Payments. Marion District currently has outstanding long-term debts payable to the United States Department of Agriculture Rural Development ("RD"), Kentucky Infrastructure Authority ("KIA"), and Citizens National Bank ("CNB"). In the Application, Marion District included \$144,771 in the calculation of its Overall Revenue Requirements to recover the annual principal payments on these debts, but it did not show the calculation of the requested amount.

Staff finds that the average annual debt payment that should be included in the calculation of Marion District's Overall Revenue Requirement should be equal to the five-year average for the years 2017 through 2021, or \$145,253, as calculated below. This five-year average allows Marion District recovery of the debt payments that will be

made during the anticipated five-year life of the rates authorized by the Commission in this proceeding.²⁷

Annual Principal and Interest Payments				
Year	RD	CNB	KIA	Total
2017	\$49,445	\$62,736	\$32,603	\$144,784
2018	49,991	62,736	32,603	145,330
2019	49,526	62,736	32,603	144,865
2020	50,051	62,736	32,603	145,390
2021	50,554	62,736	32,603	145,893
Five-Year Total				726,263
Divide by: 5 Years				<u>5</u>
Five-Year Average				<u>\$145,253</u>

(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 the district's average annual debt payments. In the Application, Marion District requested rate recovery of additional working capital in the amount of \$17,373, but it neither explained nor demonstrated how it calculated this amount. Using the Commission's method, Staff

²⁷ Generally, the anticipated life of a utility's service rates is based on the frequency of the utility's previous general rate case filings, but 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.

A review of the Commission's electronic docket system shows that, while Marion District last adjusted its monthly water service rates pursuant to KRS 278.023 in 2009 as a condition to RD's purchase of Marion District's bonds, Marion District has not requested a general rate adjustment pursuant to either 807 KAR 5:076 or 807 KAR 5:001, Section 16, in at least 13 years. Therefore, Staff finds that the anticipated life of the rates approved in this proceeding is five years.

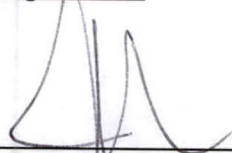
determined that Marion District's additional working capital should be stated at \$29,051 as calculated below.²⁸

Average Annual Principal and Interest Payments	\$ 145,253
Times: DSC Ratio	<u>120%</u>
Total Net Revenues Required	174,303
Less: Average Annual Principal and Interest Payments	<u>(145,253)</u>
Additional Working Capital	<u>\$ 29,051</u>

²⁸ The RD bond resolution requires Marion District to 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 bonds. 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 principal and interest 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 Marion County's overall revenue requirement.

	<u>With Additional Working Capital</u>	<u>Without Additional Working Capital</u>
Overall Revenue Requirement	\$ 2,747,867	\$ 2,718,816
Less: Operation and Maintenance Expense	(2,160,734)	(2,160,734)
Taxes Other Than Income	<u>(26,782)</u>	<u>(26,782)</u>
Net Revenues	560,351	531,300
Divide by: Average Annual Debt Payment	<u>145,253</u>	<u>145,253</u>
DSC Ratio	<u>386%</u>	<u>366%</u>

Signatures



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



Prepared by: Eddie Beavers
Water and Sewer Rate Design Branch
Division of Financial Analysis

ATTACHMENT A

STAFF REPORT, CASE NO. 2016-00163

Staff Calculated Monthly Water Rates

Customer Charge

5/8-Inch x 3/4-Inch Meter	\$ 7.45 per Month
1-Inch Meter	16.20 per Month
2-Inch Meter	25.68 per Month
3-Inch Meter	40.73 per Month
4-Inch Meter	64.60 per Month
6-Inch Meter	162.59 per Month

Water Charge

All Usage	\$ 5.65 per 1,000 gallons
-----------	---------------------------

ATTACHMENT B

STAFF REPORT, CASE NO. 2016-00163

Marion District Allocation Factors

	2015 Schedules and Disclosures	CMC 2015 Report
Marion District's Contributions to CERS	\$ 35,456	\$ 35,872
Divide by: All Contributions to CERS	298,565,550	298,565,550
Percentage of Total	0.011875%	0.012015%

Difference in Pension Amounts Shown in the 2015 Schedules and Disclosures and the CMC 2015 Report

	Deferred Outflows				Deferred Inflows				
	NPL	Difference Between Expected and Actual Experience	Difference Between Projected and Actual Earnings	Change of Assumptions	Change in Proportion and Difference Between Contributions and Proportionate Share of Contributions	Change in Proportion and Difference Between Contributions and Proportionate Share of Contributions	Pension Expense Before Accounting for Deferred Amounts from Changes in Proportionate Share	Adjustment to Allocated Pension Expense for Deferred Amounts	Pension Expense After Deferred Adjustments
Total Pension Amounts Stated In:									
2015 Schedules and Disclosures	\$ 4,299,525,565	\$ 35,730,603	\$ 38,541,770	\$ 433,560,101	\$ 38,917,249	\$ 38,917,249	\$ 483,730,768		\$ 483,730,768
CMC 2015 Report	4,299,525,565	35,730,603	38,541,770	433,560,101	37,890,737	37,890,737	483,730,768		483,730,768
Difference	\$ -	\$ -	\$ -	\$ -	\$ 1,026,512	\$ 1,026,512	\$ -	\$ -	\$ -
Marion District's Share Stated in:									
2015 Schedules and Disclosures	\$ 510,592	\$ 4,243	\$ 4,577	\$ 51,488	\$ 7,229	\$ -	\$ 57,446	\$ 2,880	\$ 60,326
CMC 2015 Report	518,583	4,293	4,631	52,092	10,823	\$ -	58,120	4,312	62,432
Difference	\$ (5,991)	\$ (50)	\$ (54)	\$ (604)	\$ (3,594)	\$ -	\$ (674)	\$ (1,432)	\$ (2,106)

*Holly Nicholas
Kentucky Eng Group PLLC
P.O. Box 1034
Versailles, KENTUCKY 40383

*Marion County Water District
1835 Campbellsville Road
P. O. Box 528
Lebanon, KY 40033

*Marion County Water District
Marion County Water District
1835 Campbellsville Road
P. O. Box 528
Lebanon, KY 40033