COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE ADJUSTMENT FILING OF MCKINNEY WATER DISTRICT	))	CASE NO. 2015-00331

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of November 2, 2015, the attached report containing the findings of Commission Staff regarding the Applicants' proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to paragraphs 2 and 4 of the Commission's November 2, 2015 Order, McKinney Water District ("McKinney") is required to file written comments regarding the findings of Commission Staff no later than 14 days after the filing of this report.

Stephanie Bell for JD

Jeff Derouen
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATED FEB 0 1 2016

cc: Parties of Record

STAFF REPORT

ON

MCKINNEY WATER DISTRICT

CASE NO. 2015-00331

McKinney Water District ("McKinney"), a water district organized pursuant to KRS Chapter 74, provides retail water service to approximately 1,852 customers that reside in the Kentucky counties of Casey and Lincoln.[1] On October 2, 2015, McKinney tendered its application ("Application") to the Commission requesting to increase its water service rates. The Application was deemed filed on October 20, 2015, when McKinney cured all filing deficiencies.

The proposed water service rates stated in the Application would increase a monthly bill for 4,000 gallons of water purchased through a 5/8-inch x 3/4-inch meter from $36.52 to $39.46, an increase of $2.94, or 8.05 percent. McKinney stated that these rates would increase its annual revenues by $64,514, or 8.03 percent.

McKinney based its requested rates on the test year ended December 31, 2014. The financial exhibits shown in McKinney's Application that support the requested rates are summarized below in condensed form:

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[1] *Annual Report of McKinney Water District to the Public Service Commission for the Calendar Year Ended December 31, 2014* ("*Annual Report*") at 12 and 53.

Pro Forma Operating Expenses	$819,535
Plus: Average Annual Principal and Interest Payments	72,210
Additional Working Capital	14,442
Overall Revenue Requirement	906,187
Less: Other Operating Revenue	(36,586)
Interest Income	(1,708)
Revenue Required From Rates	867,893
Less: Pro Forma Present Rate Service Revenues	(803,380)
Required Revenue Increase	$ 64,513
Percent Increase	8.03%

To determine the reasonableness of the water service rates requested by McKinney, Staff performed a limited financial review of McKinney's operations for the test year ended December 31, 2014. The scope of the 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. All insignificant and immaterial discrepancies were not pursued or addressed.

Staff's findings are summarized in this report. David Foster reviewed the calculation of McKinney's Overall Revenue Requirement. Sam Reid reviewed McKinney'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 McKinney's Overall Revenue Requirement is $881,397,

and that a revenue increase of $50,045, or 6.22 percent, over pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. Water Service Rates. To generate its requested revenue increase, McKinney proposed to increase all of its current water service rates evenly by 8.05 percent. McKinney did not perform a cost-of-service study. 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. Given this precedent, Staff finds that an across-the-board 6.22 percent increase is the appropriate means to allocate the increased revenue requirement. The rates set forth in Attachment A to this report are based upon this method and will produce sufficient revenues from water sales to recover the $854,103 determined by Staff when establishing the Overall Revenue Requirement of $881,397. These rates will increase a residential customer's monthly bill for 4,000 gallons of water purchased through a 5/8-inch x 3/4-inch meter from $36.52 to $38.80, an increase of $2.28, or 6.24 percent.

3. Depreciable Lives. In Attachment B of this report, Staff revised the depreciable lives assigned to some of McKinney's assets for ratemaking purposes. McKinney should use the revised lives to calculate depreciation expense for accounting purposes in all future reporting periods. These lives better match the life expectancy of McKinney's assets and will better match depreciation expense to the revenues generated by the water service rates approved in this proceeding. 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 Statement

McKinney's Pro Forma Operating Statement for the test year ended December 31, 2014, as determined by Staff, appears below:

	Test Year	Adjustment	(Ref.)	Pro Forma
Operating Revenues				
Sales of Water	$ 772,203	$ 32,125	(A)	
		(269)	(B)	$ 804,059
Other Water Revenues	36,586	(11,000)	(C)	25,586
Total Operating Revenues	808,789	20,856		829,645
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	161,180	(5,500)	(D)	
		4,670	(E)	160,350
Salaries and Wages - Commissioners	18,650			18,650
Purchased Water	377,280	31,937	(F)	
		(60,393)	(G)	348,824
Materials and Supplies	50,173	(5,500)	(D)	44,673
Contractual Services	77,017			77,017
Water Testing	3,242			3,242
Transportation Expenses	16,447			16,447
Insurance	11,179			11,179
Bad Debt Expense	2,999			2,999
Misc. Expense	17,244	(640)	(G)	16,604
Total Operation and Maintenance Expenses	735,411	(35,426)		699,985
Depreciation Expense	102,032	(22,100)	(H)	79,932
Taxes Other Than Income	14,470	357	(E)	14,827
Total Operating Expenses	851,913	(57,168)		794,745
Net Operating Income	(43,124)	78,024		34,900
Interest Income	1,708			1,708
Income Available to Service Debt	$ (41,417)	$ 78,024		$ 36,608

(A) Test-year normalized revenues. McKinney's application included a billing analysis generated from McKinney's billing software. The billing analysis filed in the Application used incorrect current rates to calculate test-year normalized revenues. Effective January 13, 2015, McKinney increased its general service rates pursuant to the Commission's Order in Case Number 2014-00435.[2] Accordingly, Staff increased test-year revenues by $32,125, based on McKinney's current rates.

(B) Billing Analysis Adjustment. McKinney's test-year revenue from water sales was stated at $772,203 in its 2014 Annual Report.[3] The billing analysis filed with the Application which reflects the amounts billed during the test year, produces revenue from water sales of $771,934. Accordingly, Staff decreased test-year reported revenues by $269.

(C) Miscellaneous Service Revenues. During the test year, McKinney collected water tap-on fees in the total amount of $11,000. It reported this amount to account 471, Miscellaneous Service Revenues, which was closed at the end of the accounting cycle to account 215.1, Retained Earnings from Income Before Contributions. As a result, the tap-on fees were included in the determination of McKinney's Net Operating Income ("NOI").

McKinney's accounting for test-year tap-on fees violates the accounting methods prescribed by the Uniform System of Accounts ("USoA"). Tap-on fees are contributions in aid of construction ("CIAC") that the USoA requires to be reported using account 432, Proceeds from Capital Contributions, which is closed to account 215.2, Donated Capital, without being included in the determination of NOI.[4] To comply with the requirements of the USoA, Staff removed the test-year tap fees from Miscellaneous Service Revenues.

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[2] Case No. 2014-00435, *Purchased Water Adjustment Filing of McKinney Water District* (Ky. PSC Jan. 13, 2015).

[3] Test-year revenues were stated at $772,203 in McKinney's application at ARF Form 1, Attachment SAO-W

[4] USoA for Water Districts and Associations at 57.

(D) Capitalization of Test-Year Meter Installations. During the test year, McKinney installed 22 new 5/8-inch x 3/4-inch meter connections with an estimated total cost of $11,000.[5] These costs include wages, wage overheads, transportation costs, equipment costs, and materials and supplies. The USoA requires that these costs be capitalized as Utility Plant in Service and depreciated over their estimated useful lives;[6] however, McKinney incorrectly reported these costs as test-year expenses.

To correct this accounting error in pro forma operations, Staff removed the estimated cost of these connections from test-year expenses and included a provision for their recovery in pro forma depreciation expense. Ideally, Staff would have reduced each of the expense accounts that contain installation costs by a portion of the capitalized costs. For simplicity, Staff decreased wages expense and materials and supplies expense by $5,500 each, or one-half of the total estimated cost. Using this abbreviated method does not have a material effect on the results of Staff's analysis of McKinney's operations.

(E) Salaries and Wages – Employees and FICA Taxes. McKinney has four full-time employees and one part-time employee. It reported $161,180 for test-year Salaries and Wages – Employees expense. In its Application, it proposed to increase this amount by $8,059 to account for a 5-percent employee wage rate increase that it stated had been approved by its Board of Commissioners on December 9, 2014.

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[5] McKinney does not utilize a work-order system to track the actual cost of constructing new plant. Absent such a system, the actual cost of the meter installations is unknown. The cost must be estimated. Staff estimated this cost to be $11,000 by multiplying McKinney's current $500 tap fee for a 5/8-inch x 3/4-inch meter installation by the number of new connections installed during 2014. Staff finds that this method produces a reasonable estimate of the total test-year meter installation costs, since the tap fee represents McKinney's average installation cost for a meter of this size.

[6] USoA, Accounting Instruction at 19 and 33.

When reviewing the minutes of McKinney's Board of Commissioner's meetings, Staff found that the approved wage rate increase was 3 percent for all employees, not the 5 percent claimed in McKinney's Application. Staff determined that the 3 percent increase would increase McKinney's Salaries and Wages expense by $4,670. To calculate this amount, Staff first reduced McKinney's test-year wages by $5,500 to account for the wage capitalization adjustment proposed by Staff in Item (D) of this section. Staff multiplied then the adjusted test-year expense by the approved 3-percent wage rate increase. The calculation of Staff's adjustment is shown below:

Test-Year Wages	$ 161,180
Less: Amount Capitalized	5,500
Test-Year Wages Expensed by Staff	155,680
Times: 3 Percent Wage Rate Increase	3%
Increase	$ 4,670

Additionally, FICA taxes reported by McKinney during the test year will increase by 3 percent as a result of the wage rate increase. Accordingly, Staff increased test-year Taxes Other Than Income by $357.[7]

(F) <u>Changes to Wholesale Purchased Water Rates</u>. McKinney purchases wholesale water for resale from the cities of Eubank and Stanford. On September 25, 2014, the city of Stanford ("Stanford") increased its wholesale rate from $2.49 per thousand gallons to $2.80 per thousand gallons. In its Application, McKinney proposed

[7]

Wage Rate Increase	$ 4,670
Times: 7.65% FICA Tax Rate	7.65%
FICA Tax Increase	$ 357

to increase its test-year Purchased Water expense by $31,937 to account for the effects of this wholesale rate increase. Staff agrees that this adjustment fairly represents, in all material respects, the increase to McKinney's test-year purchased water expense that will result from Stanford's wholesale water rate increase. Staff increased test-year purchased water expense by $31,937, the amount of McKinney's proposed adjustment.

(G) Water Loss. Pursuant to 807 KAR 5:066 Section (6)3, McKinney's water loss is limited to 15 percent for ratemaking purposes unless it can demonstrate that an alternative level is reasonable. McKinney reported test-year water loss at 29.76 percent, or 14.76 percent above the amount allowed. It did not attempt to demonstrate that the excess water loss is reasonable. Instead, it proposed to decrease test-year Purchased Water expense by $55,687 to remove the cost incurred to purchase the excess water loss from its wholesale suppliers.

Absent evidence supporting a water loss percentage that is in excess of the 15 percent allowed by 807 KAR 5:066, Section (6)3, Staff agrees that an adjustment to McKinney's Purchased Water expense is necessary to eliminate the cost of the excess water loss; however, Staff does not agree with the amount of the adjustment calculated by McKinney.

McKinney calculated its adjustment by multiplying its reported test-year Purchased Water expense by the percentage of water loss that exceeds the amount allowed.[8] This method does not account for the increase to the cost of lost water that will result from Stanford's September 25, 2014 wholesale rate increase, which is discussed in Item (F) of this section. As shown below, after accounting for the increased wholesale water cost, Staff determined that the cost of excess water loss that should be removed to calculate McKinney's pro forma operations is $60,393.

Test-Year Purchased Water Expense	$	377,280
Plus: Effects of Wholesale Rate Increase		31,937
Amount Subject to Water Loss Adjustment		409,217
Times: Excess Water Loss Percentage		-14.76%
Decrease	$	(60,393)

In addition to removing the cost paid to wholesale suppliers to purchase the excess water loss, the Commission has historically removed the cost of electricity to pump, and the cost of chemicals to treat, the excess water loss.[9] While McKinney did not incur chemical costs during the test year, it did incur $4,339 for purchased power necessary to pump water to its customers. McKinney did not propose to remove the portion of this expense that was incurred to pump the excess water loss. Following the Commission's historic practice, Staff removed $640 as calculated below:

[8]

Test-Year Purchased Water Expense	$	377,280
Times: Excess Water Loss Percentage		14.76%
Decrease Proposed by McKinney	$	55,687

[9] Case No. 2014-00342, *Application of Mountain Water District for an Adjustment of Water and Sewer Rates* (Ky. PSC Oct. 9, 2015), Order at 16.

	Purchased Power
Test-Year Subject to Water Loss Adjustment	4,339
Times: Water Loss in Excess of 15 Percent	-14.76%
Decrease	$ (640)

(H) Depreciation. McKinney reported test-year depreciation expense in the amount of $102,032.[10] As shown in McKinney's plant ledger that was included as part of its Application, McKinney calculated the test-year amount by dividing each asset's original cost by its estimated useful life.

In its Application, McKinney stated that the useful lives assigned to certain assets were at variance with the life ranges found reasonable in the National Association of Regulatory Utility Commissioners' Study of Depreciation Practices for Small Water Utilities ("NARUC Study"), dated August 15, 1979. For ratemaking purposes, McKinney proposed to adjust the lives assigned to these assets to conform to the NARUC Study. McKinney determined that application of its proposed lives would decrease test-year depreciation expense by $17,304.

The Commission's Division of Engineering ("Engineering") reviewed the lives used by McKinney during the test year as well as the adjustments to those lives that it proposed to conform to the NARUC Study. A summary of Engineering's review is shown at Attachment B of this report. To account for the effects of Engineering's

[10] The Engineering Division reviewed the lives assigned to all assets listed in Exhibit 7 of the Application, including assets that required no adjustment to their depreciable lives. The depreciation expense of $90,794 included in Staff's chart on pages 11 and 12 of this report included only the assets whose depreciable lives were adjusted.

findings, Staff decreased test-year depreciation expense by $22,414, as calculated below:

NARUC Account Number Shown in Attachment B	Property Description taken from Tax Asset Detail shown in Application	Cost	Divide by: Staff Useful Life	Pro Forma Depreciation
390	Pump Station - FHA	$71,544	35	$ 2,044
324-7	Maywood Pump Project	164,873	20	8,244
341	Fence for Water Tank - AKE	2,270	35	65
342	40' Storage Container	2,900	30	97
	Tank Refurbish Project	66,317	30	2,211
343	Hwy 78 Line Project	79,580	50	1,592
	CAP Eng. & Design Costs	190,962	50	3,819
	CAP Legal Fees	4,180	50	84
	Trans Lines - FHA	488,798	50	9,776
	Services - FHA	39,220	50	784
	Capitalized Interest - FHA	9,591	50	192
	Transmission Lines	12,226	50	245
	Capitalized Legal/Engineering	9,644	50	193
	Capitalized Interest	13,425	50	269
	Lines Extension Proj-Cont	683,847	50	13,677
	Services - Line Ext. Proj	31,400	50	628
	Lines - Extension Project	564,777	50	11,296
	PEH Fees - Line Ext Project	183,541	50	3,671
	Rubin Hayes & Foley - Line	10,461	50	209
	Carol Hill Legal Fees	5,417	50	108
	Bluegrass Add Fees - Cont	37,600	50	752
	100 Ft. 4" Waterline - Clay	5,000	50	100
	4100 ft. 4" line - McKinney Ridge	11,370	50	227
346	Meters - FHA	19,159	35	547
	Master Meter/Etc - Line	11,000	35	314
	Master Meter/Etc - Line Ext.	12,740	35	364
	Flow Meter	5,214	35	149
348	Hydrants	6,776	40	169
390	Office Remodelling	4,568	35	131
	Building Improvement	11,225	35	321
	Fence - Office Parking Lot	2,646	35	76
	Roof on Office	2,240	35	64

392	2005 F150	14,598	7	2,085
394	Leak Detector	1,795	15	120
	Pipe Locator	4,395	15	293
397	Computer w/back up systems	1,219	10	122
	Telemetry - Booster Station	12,750	10	1,275
	Telemetry - Bonneville Tank	12,750	10	1,275
	Nicki Computer - Software Solutions	2,551	10	255
	Donna Computer - Software Solutions	2,551	10	255
	Copier - Purcells	895	10	90
	Surveillance System	1,955	10	195
Pro Forma				68,381
Less: Test-Year Depreciation on Assets Listed in the Adjustments				(90,794)
Decrease				$ (22,414)

In addition to the adjustment to test-year depreciation expense that results from Engineering's change to depreciable lives, Staff increased test-year depreciation by $314[11] to account for the additional depreciation that will accrue on the meter installation costs that were capitalized by Staff in Item (D) of this section.

Staff's overall net adjustment to McKinney's test-year depreciation expense is a decrease in the amount of $22,100, as summarized below:

Decrease Due to Change in Depreciable Lives	$ (22,414)
Increase Due to Meter Installations Capitalized by Staff	314
Net Decrease	$ (22,100)

11

Total Meter Installation Costs Capitalized by Staff	11,000
Divide by: Depreciable Life	35
Increase to Depreciation Expense	$ 314

Overall Revenue Requirement and Required Revenue Increase

The Commission has historically applied a DSC method to calculate the Overall Revenue Requirement of water districts and water associations. This method allows for recovery of: 1) cash-related pro forma operating expenses; 2) recovery of depreciation expense, a non-cash item, to provide working capital;[12] 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 McKinney's and Staff's calculation of McKinney's Overall Revenue Requirement and Required Revenue Increase using the DSC method is shown below:

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

	McKinney	Staff
Pro Forma Operating Expenses	$819,535	$794,745
Plus: Average Annual Principal		
and Interest Payments on Current Debts	72,210	72,210
Additional Working Capital	14,442	14,442
Overall Revenue Requirement	906,187	881,397
Less: Other Operating Revenue	(36,586)	(25,586)
Interest Income	(1,708)	(1,708)
Revenue Required From Rates	867,893	854,103
Less: Pro Forma Present Rate Service Revenues	(803,380)	(804,059)
Required Revenue Increase	$ 64,513	$ 50,044
Percent Increase	8.03%	6.22%

1. Average Annual Principal and Interest Payments. McKinney has five outstanding bond series payable to the United States Department of Agriculture Rural Development ("RD"). In its Application, McKinney requested recovery of the three-year average principal and interest payments due on these bonds in the years 2015, 2016, and 2017. Staff agrees that the $72,210 requested by McKinney represents, in all material respects, the average annual debt payments that will be made in each year that the water rates approved by the Commission in this proceeding will remain in effect.

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. As shown below, McKinney calculated its allowance for additional working capital in this case to be $14,442. Staff agrees with McKinney's calculation and has included $14,442 in the calculation of McKinney's Overall Revenue Requirement.

Average Annual Principal and Interest	$ 72,210
Times: DSC Ratio	120%
Total Net Revenues Required	86,653
Less: Average Annual Principal and Interest Payments	(72,210)
Additional Working Capital	$ 14,442

Signatures

Prepared by: David P. Foster
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Prepared by: Sam Reid
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ATTACHMENT A

STAFF REPORT, CASE NO. 2015-00331
RATES CALCULATED BY STAFF

Monthly Rates

5/8- X 3/4-Inch Meter

First	1,000 Gallons	$ 14.20 Minimum Bill
Next	2,000 Gallons	8.67 per 1,000 Gallons
Next	7,000 Gallons	7.26 per 1,000 Gallons
Over	10,000 Gallons	6.58 per 1,000 Gallons

1-Inch Meter

First	5,000 Gallons	$ 46.06 Minimum Bill
Next	5,000 Gallons	7.26 per 1,000 Gallons
Over	10,000 Gallons	6.58 per 1,000 Gallons

2-Inch Meter

First	20,000 Gallons	$ 148.16 Minimum Bill
Over	20,000 Gallons	6.58 per 1,000 Gallons

ATTACHMENT B

STAFF REPORT, CASE NO. 2015-00331

McKINNEY WATER DISTRICT
CASE NO. 2015-00331

ENGINEERING DIVISION'S
ANALYSIS OF ASSET SERVICE LIVES
FOR WATER SYSTEMS

Historically, the Commission has relied on the *Depreciation Practices for Small Water Utilities* by National Association of Regulatory Utility Commissioners ("NARUC"), Washington, DC, August 15, 1979, pp 11, to evaluate the reasonableness of a utility's depreciation practices. This study outlines expected service life ranges for various asset groups designed, installed, and maintained in accordance with good water utility practices. Typically, an adjustment is made when the Commission finds that a utility is proposing to use a service life that falls outside of the range, while service lives falling within these ranges are generally accepted.

Certain asset service lives proposed in this case were found to be outside the Commission's established guidelines or as otherwise previously adopted by the Commission.

NARUC Account Number	Type of Asset	NARUC Average Service Life	Submitted Service Life/Lives	Recommended Staff Report Service Life/Lives
324-7	Pumping Equipment	20	33	20
341	Structures and Improvements	35-40	33	35
342	Reservoirs and Tanks	30-60	33, 15, 20	33, 30
343	Transmission and Distribution Mains	50-75	50, 33, 35	50
390	Structures and Improvements	35-40	20	35
392	Transportation Equipment	7	5	7
394	Tools, Shop & Garage Equipment	15-20	10	15
397	Communications Equipment	10	10, 5	10

NOTE: Some Types of Asset had more than one service life submitted. In these cases, service life/lives that were within the NARUC range should remain unchanged.

The Recommended Staff Report Service Life/Lives should be used for the purpose of the Commission Staff Report unless specific and verifiable evidence supports using alternative service lives.

Prepared January 25, 2016

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