COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF EAST DAVIESS COUNTY)	
WATER ASSOCIATION, INC. FOR RATE)	CASE NO.
ADJUSTMENT PURSUANT TO 807 KAR 5:076)	2016-00177

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of June 14, 2016, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's June 14, 2016 Order, East Daviess County Water Association, Inc. 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 <u>SEP 0 1 2016</u>

cc: Parties of Record

STAFF REPORT

ON

EAST DAVIESS WATER ASSOCIATION, INC.

CASE NO. 2016-00177

East Daviess Water Association, Inc. ("East Daviess"), a water association organized in 1970, provides water service to approximately 4,492 customers that reside in the Kentucky counties of Daviess, Hancock, and Ohio.¹ On June 2, 2016, the Commission accepted for filing East Daviess's application ("Application") to increase its monthly water service rates by 7.8 percent pursuant to 807 KAR 5:076, except for fire protection rates. East Daviess did not propose to increase contracted fire protection rates. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated June 14, 2016.

As required by 807 KAR 5:076, Section 3, East Daviess 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 ending December 31, 2015.

The requested rates would increase a monthly bill of a typical residential customer² from \$30.49 to \$32.87, an increase of \$2.38, or 7.8 percent, and would generate \$118,913 in additional annual water sales revenues, a 7.8 percent increase.

¹ Annual Report of East Daviess Utilities, Inc. to the Public Service Commission for the Calendar Year Ended December 31, 2015 ("Annual Report") at 9 and 12.

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

East Daviess presented financial exhibits in the Application to support the amount of its requested revenue increase.

To determine the reasonableness of East Daviess's requested rates, Staff performed a limited financial review of East Daviess' test-year operations. 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. 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 East Daviess's Overall Revenue Requirements. Jason Green reviewed East Daviess'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 that is historically accepted by the Commission, Staff found that East Daviess's Overall Revenue Requirement is \$1,746,610 and that a revenue increase of \$104,999, or 6.88 percent, is necessary to generate the Overall Revenue Requirement.
- 2. Rates. In the Application, East Daviess proposed to increase all of its monthly water service rates evenly across the board by approximately 7.8 percent, except for the contracted monthly fire protection rates that are assessed to four customers. East Daviess did not propose to increase fire protection rates.

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 East Daviess and allocated the \$104,999 revenue increase evenly across the board to East Daviess's current monthly water service rates, except for the fire protection rates. Staff did not adjust the fire protection rates.

The monthly water service rates calculated by Staff are shown in the Attachment to this report. These rates will increase a typical residential customer's monthly bill from \$30.49 to \$32.59, an increase of \$2.10, or 6.89 percent.

3. <u>Depreciable Lives</u>. In Case No. 2013-00366,³ Staff issued a report wherein it found that changes should be made to the depreciable lives assigned to some of East Daviess's water asset account groups for ratemaking and accounting purposes in future reporting periods. After East Daviess agreed with Staff's findings,⁴ the Commission Ordered that the changes be made as follows:⁵

³ Case No. 2013-00366, Alternative Rate Filing Application of East Daviess County Water Association, Inc. (Ky. PSC Jan. 31, 2014).

⁴ East Daviess' response letter dated February 18, 2014, from William Haynes, President, East Daviess County Water Association to Jeff Derouen, Executive Director, Public Service Commission.

⁵ Case No. 2013-00366, East Daviess County Water Association, Inc. (Ky. PSC Mar. 7, 2014), Order at 7.

Asset Group	Used by East Daviess	Commission Ordered
Pumping Equipment	10-50 years	20 years
Meters	20-50 years	40 years
Office Furniture and Equipment	5-10 years	22.5 years
Structures	20-30 years	37.5 years
Transportation Equipment	5 years	7 years
Transmission and Distribution Mains	50 years	62.5 years

As discussed in this report at Ref. Item (B) on page 6, East Daviess did not adjust the depreciable lives for accounting purposes in the reporting periods that followed the Commission's Order. East Daviess should ensure that it applies the authorized lives when calculating depreciation for accounting purposes in all future reporting periods. Neither accumulated depreciation nor retained earnings should be adjusted retroactively to account for the effect of this change in accounting estimate.

Pro Forma Operating Statement

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

		Test Year	Adju	stments	(Ref.)	Pro	Forma
Operating Revenues Water Sales Revenue							
Metered Water Sales	\$	1,524,546	\$	(199)	(A)	\$1.5	524,347
Fire Protection Revenue	Ψ	1,560	Ψ	(.00)	(, ,	Ψ.,,	1,560
			**				
Total Water Sales Revenue		1,526,106		(199)			525,907
Other Operating Revenue		111,705					111,705
Total Operating Revenues		1,637,811		(199)		1,6	637,612
Operating Expenses							
Operation and Maintenance		000 440				,	200 440
Salaries and Wages - Employees		363,118					363,118
Salaries and Wages - Officers Employee Pensions and Benefits		12,750 120,995					12,750 120,995
Purchased Water		377,063					377,063
Purchased Power		38,458				,	38,458
Materials and Supplies		44,120					44,120
Contractual Services		130,338					130,338
Transportation Expenses		24,216					24,216
Insurance		31,406					31,406
Bad Debt		18,390					18,390
Miscellaneous		34,861					34,861
Total Operation and Maintenance		1,195,715		_		1.1	195,715
Depreciation		294,605	(4	8,822)	(B)	20.	245,783
Taxes Other Than Income		32,182			(-)		32,182
Total Operating Expenses		1,522,502	(4	8,822)		1,4	473,680
Net Operating Income		115,309	4	8,623			163,932
Interest Income		3,999					3,999
Income Available to Service Debt	\$	119,308	\$4	8,623		\$	167,931

(A) Operating Revenue. East Daviess provided a billing analysis showing the gallons of water billed to 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

decreases test-year revenues by \$199. Staff recalculated test-year normalized revenues from retail sales to be \$1,524,347.

(B) <u>Depreciation</u>. East Daviess reported test-year depreciation expense in the amount of \$294,605. As previously discussed, in Case No. 2013-00366, the Commission ordered that East Daviess change the depreciable lives assigned to certain asset account groups for accounting purposes in all future reporting periods.

Due to an administrative oversight, East Daviess failed to make the ordered changes to its plant ledger, where depreciation expense is calculated annually for reporting purposes. As a result, test-year depreciation expense was calculated and reported using the unauthorized lives. East Daviess discovered this error when preparing the Application.

To correct the error for ratemaking purposes, and to remove test-year depreciation expense on assets that had become fully depreciated as of the end of the test year, East Daviess reduced test-year depreciation expense by \$48,822. Staff agrees with the proposed adjustment and decreased test-year depreciation expense by \$48,822.

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.⁶ 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; 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 East Daviess's and Staff's calculation of East Daviess's Overall Revenue Requirement and Required Revenue Increase using the Commission's DSC method is shown below:

⁶ See Case No. 1989-00377, In the Matter of the Application of East Daviess County Water Association, Inc. to Reduce Water Rates to Residential Customers in South Hancock County, Kentucky (Ky. PSC Oct. 19, 1990); Case No. 1999-00409, In the Matter of an Adjustment of Rates for the Harrison County Water Association, Inc. (Ky. PSC Apr. 27, 2000); and Case No 2005-00477, The Application of the West Laurel Water Association, Inc. for Approval of a Proposed Increase in Rates for Water Service (Ky. PSC May 15, 2006).

⁷ 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).

	East Daviess	Staff	(Ref.)
Pro Forma Operating Expenses Plus: Average Annual Debt Payment Additional Working Capital	\$1,473,680 237,330 47,466	\$1,473,680 237,330 35,600	(1) (2)
Overall Revenue Requirement	1,758,476	1,746,610	
Less: Other Operating Revenue	(111,705)	(111,705)	
Interest Income	(3,999)	(3,999)	
Revenue Required from Rates	1,642,772	1,630,906	
Less: Pro Forma Revenue from Present Rates	(1,524,347)	(1,525,907)	
Required Revenue Increase	\$ 118,425	\$ 104,999	
Percent Increase	7.77%	6.88%	

- (1) Average Annual Principal and Interest Payments. East Daviess has one outstanding note payable to the United States Department of Agriculture Rural Development ("RD") and one note payable to U.S. Bank ("Bank"). To retire these notes, East Daviess pays \$31,228 annually to RD and \$17,175 monthly to the Bank. East Daviess requested to include the total annual payments of \$237,330 in the calculation of its Overall Revenue Requirement.⁸ Staff agrees with the requested amount.
- (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 an association's lenders that are above its average

	Total Annual Loan Payments	\$ 237,330
	Bank Loan (\$17,175.14 x 12 Months)	 206,102
	RD	\$ 31,228
8		

annual debt payments. In this case, East Daviess calculated its allowance for additional working capital to be \$47,466 as follows:

Annual Debt Payment Times: Coverage Ratio		237,330 120%
Required Net Revenues Less: Annual Debt Payment		284,796 (237,330)
Allowance for Additional Working Capital	\$	47,466

Staff disagrees with the amount calculated by East Daviess. East Daviess calculated working capital on its long-term debts as though the RD note were RD bonds. RD bonds generally require that a borrower maintain a DSC ratio of 120 percent on all RD bonds as well as any other debts that are on par with the RD bonds. The copy of the RD promissory note agreement that was provided by East Daviess in the Application has no stated DSC ratio requirements. Although this agreement is silent, Staff understands, from discussions with an RD Loan Specialist, that other documents used to execute the note require that East Daviess assess water service rates that produce enough cash flow to repay the loan and to produce a DSC ratio of at least 110 percent in a reporting period immediately following the issuance of additional evidences of indebtedness that are on par with the RD note.

The 110 percent DSC ratio required by the RD note is trumped by the higher ratio required on the Bank note. The Bank requires that East Daviess maintain a "Fixed

⁹ Generally, a bond resolution, wherein a borrower and RD agree to the terms of the bonds, has two covenants that are tied to the DSC ratio. First, the resolution states that the borrower's DSC ratio must be at least 120 percent before the borrower may issue additional parity bonds. Second, the resolution states that the district must charge rates for service that will generate net revenues that result in a DSC ratio of at least 120 percent.

Charge Coverage Ratio" that is equal to at least 115 percent of East Daviess's average annual principal and interest payments on all debts, including the RD note.¹⁰

¹⁰ Application, U.S. Bank Term Loan Agreement at 5. The "Fixed Charge Coverage Ratio" as of the end of the fiscal year for the four (4) fiscal quarters then ended shall be at least 1.15:1. "Fixed Charge Coverage Ratio" shall mean (a) EBITAR minus cash taxes, cash dividends, cash distributions and Maintenance Capital Expenditures divided by (b) the sum of <u>all</u> required principal payments (on short-and long-term debt and capital leases), interest and rental or lease expense. "EBITDAR" shall mean net income plus interest expense, plus income tax, plus depreciation expense, plus amortization expense, plus rent or lease expense. "Maintenance Capital Expenditures" shall mean 50% of BORROWER'S depreciation expense for the period specified.

Accordingly, Staff calculated East Daviess's allowance for additional working capital to be \$35,600 as follows:¹¹

Annual Payment Times: Coverage Ratio	\$ 237,330 115%
Required Net Revenues Less: Annual Debt Payment	 272,930 (237,330)
Allowance for Additional Working Capital	\$ 35,600

The allowance for additional working capital is included to provide working capital that is in addition to the amount provided through recovery of depreciation expense. Inclusion of the additional working capital in the calculation of the Overall Revenue Requirement is not necessary for East Daviess to meet the minimum Fixed Asset Charge Ratio required by the Bank. As shown below, the minimum ratio is met with or without including the additional working capital.

	Fixed Charge Coverage Ratio		
		Without	
	With Additional	Additional	
	Working Capital	Working Capital	
EBITDAR			
Income Available to Service Debt at Present Rates	\$ 167,931	\$ 167,931	
Plus: Revenue Increase	104,999	69,399	
Less: Interest Expense	(54,562)	(54,562)	
Pro Forma Net Income After Revenue Increase	218,368	182,768	
Plus: Interest Expense	54,562	54,562	
Depreciation Expense	245,783	245,783	
Total EBITDAR Less: Maintenance Capital Expenditures = 1/2 of	518,713	483,113	
Depreciation Expense	(122,892)	(122,892)	
Income for Ratio Calculation Divide by: Average Debt Payments	395,821 237,330	360,222 237,330	
Fixed Charge Coverage Ratio	167%	152%	

Signatures

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

Prepared by: Jason Green Rate Analyst, Communications, Water,

and Sewer Rate Design Branch Division of Financial Analysis

ATTACHMENT

STAFF REPORT, CASE NO. 2016-00177 EAST DAVIESS COUNTY WATER ASSOCIATION

Monthly Water Rates

5/8- x 3/4-Inch Meter First 2,000 Gallons Next 4,000 Gallons Next 44,000 Gallons Over 50,000 Gallons	\$ 16.24 Minimum Bill 5.45 Per 1,000 Gallons 4.36 Per 1,000 Gallons 3.56 Per 1,000 Gallons
3/4-Inch Meter First 3,000 Gallons Next 3,000 Gallons Next 44,000 Gallons Over 50,000 Gallons	\$ 21.69 Minimum Bill 5.45 Per 1,000 Gallons 4.36 Per 1,000 Gallons 3.56 Per 1,000 Gallons
1-Inch Meter First 6,000 Gallons Next 44,000 Gallons Over 50,000 Gallons	\$ 38.04 Minimum Bill 4.36 Per 1,000 Gallons 3.56 Per 1,000 Gallons
1 1/2-Inch Meter First 10,000 Gallons Next 40,000 Gallons Over 50,000 Gallons	\$ 55.48 Minimum Bill 4.36 Per 1,000 Gallons 3.56 Per 1,000 Gallons
2-Inch Meter First 20,000 Gallons Next 30,000 Gallons Over 50,000 Gallons	\$ 99.08 Minimum Bill 4.36 Per 1,000 Gallons 3.56 Per 1,000 Gallons
LEAK ADJUSTMENT RATE	\$ 2.46 Per 1,000 Gallons
WHOLESALE WATER RATES	\$ 1.76 Per 1,000 Gallons

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