COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY-AMERICAN WATER COMPANY FOR AN ADJUSTMENT OF ITS WASTEWATER RATES PURSUANT TO 807 KAR 5:076	))))	CASE NO. 2014-00390

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of December 23, 2014, 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 paragraphs 2 and 5 of the Commission's December 23, 2014 Order, Kentucky-American Water Company is required to file written comments regarding the findings of Commission Staff no later than April 14, 2015.

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

DATED MAR 3 1 2015

cc: Parties of Record

STAFF REPORT

ON

KENTUCKY-AMERICAN WATER COMPANY

CASE NO. 2014-00390

Kentucky-American Water Company ("Kentucky-American"), a Kentucky corporation, owns and operates water production and distribution facilities that provide water service to 125,628 customers for compensation in Bourbon, Clark, Fayette, Gallatin, Grant, Harrison, Jessamine, Owen, Scott, and Woodford counties, Kentucky.[1] Its wastewater division owns and operates sewage collection and treatment facilities in Owen and Clark counties, Kentucky, that serve 718 customers.[2]

On November 14, 2014, Kentucky-American tendered an application to the Commission for an adjustment of sewer rates pursuant to 807 KAR 5:076. After Kentucky-American corrected filing deficiencies, its Application was accepted for filing on December 9, 2014. Kentucky-American based its application on the test year ended December 31, 2013. Using operations reported for the test year, Kentucky-American determined that it could justify a revenue increase of $190,224, or 63.41 percent;[3] however, Kentucky-American is limiting its request to an increase of 20.4 percent, or $61,183,[4] in additional revenues from its sewer rates.

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[1] *Annual Report of Kentucky-American Water Company to the Public Service Commission for the Calendar Year Ended December 31, 2013* at 55.

[2] *Annual Report of Kentucky-American Water Company, Sewer Division, to the Public Service Commission for the Calendar Year Ended December 31, 2013* ("*2013 Annual Report*") at 25.

[3] Application, Attachment RR-OR.

[4] *Id.* at 3.

Kentucky-American is requesting a two-step rate phase-in of 10 percent annual rate increases. Kentucky-American's first 10 percent rate increase would produce additional annual revenues of $29,133[5] and was originally proposed to be implemented on December 14, 2014. The second 10 percent increase would produce additional annual revenues of $32,050 and would become effective on December 14, 2015. According to Kentucky-American, although "these two increases will not afford Kentucky American Water with revenues that will fully recover the costs of current operating expenses and capital costs attributed to it's *[sic]* sewer operations, the proposed increases are designed to reduce the amount of loss while providing gradual rate increases to customers."[6]

The table below shows the impact the proposed phase in rate increases[7] will have upon the average sewer bill for a residential customer using 5,000 gallons of water.

	Current Rates	Phase I Proposed Rates: Bill	Phase I Proposed Rates: $ Increase	Phase I Proposed Rates: % Increase
Phase I:				
Rockwell	$ 20.75	$ 22.83	$ 2.08	10%
Owenton - Inside City	$ 37.45	$ 41.20	$ 3.75	10%
Owenton - Outside City	$ 52.46	$ 52.46	$ -	0%

	Phase I Rates	Phase II Proposed Rates: Bill	Phase II Proposed Rates: $ Increase	Phase II Proposed Rates: % Increase
Phase II:				
Rockwell	$ 22.83	$ 25.11	$ 2.28	10%
Owenton - Inside City	$ 41.20	$ 45.32	$ 4.12	10%
Owenton - Outside City	$ 52.46	$ 52.46	$ -	0%

[5] *Id.*, Notice at 1. December 2014 Increase, $2,008 (Rockwell Residential) + $482 (Rockwell Commercial) + $36 (Rockwell Industrial) + $15,089 (Owenton – Inside City Residential) +$10,070 (Owenton – Inside City Commercial) + $1,448 (Owenton – Inside City Industrial) = $29,133.

[6] *Id.* Reasons for Application.

[7] There are only 19 Owenton outside-city customers. Kentucky-American states that preparing a cost-of-service study for the Owenton system is economically infeasible. Therefore, it is proposing to freeze the Owenton outside rates until such time as all Owenton customers are paying the same rate.

The financial exhibits shown in Kentucky-American's application that support the revenue increase that could be justified are summarized below in condensed form:

Account Titles	Test-Year Operations	Pro Forma Adjustments	Pro Forma Operations
Operating Revenues:			
Sewage Service Revenues - Measured	$ 299,972	$ 0	$ 299,972
Other Operating Revenues	4,505	0	4,505
Total Operating Revenues	304,477	0	304,477
Operating Expenses:			
Operation & Maintenance Expenses	280,060	0	280,060
Depreciation	102,206	0	102,206
Amortization	(25,928)	0	(25,928)
Taxes Other than Income Tax	5,063	0	5,063
Total Operating Expenses	361,401	0	361,401
Net Operating Income	(56,924)	0	(56,924)
Other Deductions: Interest Expense	0	48,137	48,137
Net Income	$ (56,924)	$ (48,137)	$ (105,061)

Revenue Requirement Calculation - Operating Ratio Method
as Presented by Kentucky-American

Pro Forma Operating Expenses before Income Taxes	$ 361,401
Divided by: Operating Ratio	88%
Sub-Total	410,683
Less: Pro Forma Operating Expenses before Income Taxes	(361,401)
Net Income Allowable	49,282
Add: Provision For State and Federal Income Taxes	31,376
Interest Expense	48,137
Pro Forma Operating Expenses before Income Taxes	361,401
Revenue Requirement - Sewer Rates	490,196
Less: Normalized Revenue from Sewer Service	(299,972)
Required Revenue Increase	$ 190,224
% Increase	63.414%

To determine the reasonableness of the proposed rates, Commission Staff performed a limited financial review of Kentucky-American's 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. Insignificant and immaterial discrepancies were not pursued or addressed.

This report contains the findings of Commission Staff's review. Mark Frost reviewed the pro forma income statement and the calculation of revenue requirement. Eddie Beavers reviewed the billing analysis, reported revenues, and rate design.

Summary of Findings

1. Overall Revenue Requirement and Required Revenue Increase. Commission Staff calculated an overall revenue requirement for Kentucky-American's sewer division of $489,559. A revenue increase of $185,648[8] is necessary to generate the overall revenue requirement. If Kentucky-American wishes to request that the Commission approve a revenue increase of this amount, it should do so in its written response to this report.

2. Rate Design. Kentucky-American proposes an across-the-board increase in general wastewater rates of approximately 21% to be placed into effect in two phases. The first phase was to occur on December 31, 2014, and the second phase was to occur on December 14, 2015. The Commission has previously found that an across-the-board increase is an appropriate and equitable method of cost allocation in

[8] $489,559 (Overall Revenue Requirement) - $4,505 (Other Operating Revenue) - $299,406 (Normalized Revenue Sewer Rates) = $185,648.

the absence of a cost-of-service study and further has found that a phased-in approach to a large rate increase is an appropriate way to lessen rate shock.

The rates set forth in the Attachment to this report are based upon the revenue requirement as calculated by Commission Staff and will produce an increase in revenues of at least 62 percent. If Kentucky-American should wish to implement the rates in the Attachment, it should be required to notify its customers of its desire to implement these rates, in addition to any previous rate notice given.

Kentucky-American proposed in its application to not increase rates for the 19 Owenton outside-city customers in this proceeding, due to the difference between the rates charged these customers and the rates charged the Owenton inside-city customers. As indicated previously, Kentucky-American had requested that the rate increase occur in two phases. The rates calculated by Commission Staff would require an increase in the Owenton outside-city customers' rate for the second phase of the increase in rates. This increase would be an approximate increase of 17 percent over the current Owenton outside-city rate. The increased rates for the Owenton outside-city customers are included in the rates for phase two shown in the Attachment, with the implementation of the phase-two rates the Owenton inside and outside rates are the same.

3. Tariff. In 1998, Kentucky-American acquired the assets of the Boonesboro Water Association, Inc., which included the Rockwell Village Mobile Home Park sewer collection and treatment system. In 2005, Kentucky-American acquired the combined water and sewer assets of the city of Owenton.

Kentucky-American currently has a tariff on file for its water division that includes information regarding its sewer service. 807 KAR 5:011, Section 2(3), requires that "[a] utility furnishing more than one (1) type of service (water and electricity for example) shall file a separate tariff for each type of service." Kentucky-American should comply with the requirements of 807 KAR 5:011, Section 2(3), by submitting a separate tariff for its sewer division.

Pro Forma Operating Statement

For the test year, Kentucky-American reported actual operating revenues and expenses of $304,477 and $361,401, respectively.[9] The only adjustment proposed by Kentucky-American to its test-year operations was to allocate $48,137 of interest expense to its sewer division.

Kentucky-American's Pro Forma Operating Statement for the test year ended December 31, 2013, as determined by Commission Staff, appears in the table below:

[9] *2013 Annual Report* at 25.

Account Titles	Test-Year Operations	Pro Forma Adjustments		Pro Forma Operations
Operating Revenues:				
Sewage Service Revenues - Measured	$ 299,972	$ (566)	A	$ 299,406
Other Operating Revenues				
Forfeited Discounts	4,200	0		4,200
Miscellaneous Operating Revenues	305	0		305
Total Other Operating Revenues	4,505	0		4,505
Total Operating Revenues	304,477	(566)		303,911
Operating Expenses:				
Operation & Maint. Exp:				
Pumping System - Labor, Materials, and Exp.	57,796	3,780	B	61,576
Sludge Hauling	333	0		333
Other - Labor, Materials, and Exp.	3,008	63	B	3,071
Fuel/Power	47,195	0		47,195
Chemicals	13,157	0		13,157
Miscellaneous - Collection System	28,934	0		28,934
Miscellaneous - Treatment and Disposal	41,461	(3,180)	C	38,281
Maint. - Collection System	474	31	B	505
Maint. - Pumping System	8,916	7	B	8,923
Maint. - Treatment and Disposal	23,288	(3,347)	D	19,941
Administrative and General Salaries	9,529	5,859	B	15,388
Service Company Allocations	0	2,615	E	2,615
Insurance	1,527	1,274	F	2,801
Employee Pensions and Benefits	35,102	3,604	G	38,706
Transportation	4,521	0		4,521
Miscellaneous	4,819	0		4,819
Total Operation & Maint. Exp.	280,060	10,706		290,766
Depreciation	102,206	231	H	102,437
Amortization	(25,928)	0		(25,928)
Taxes Other than Income Tax	5,063	1,172	I	6,235
Total Operating Expenses	361,401	12,109		373,510
Net Operating Income	(56,924)	(12,675)		(69,599)
Other Deductions - Interest Long-Term Debt	0	32,689	J	32,689
Net Income	$ (56,924)	$ (45,364)		$ (102,288)

Commission Staff Pro Forma Adjustments

A. Water Sales Normalization. Kentucky-American provided a billing analysis with its application that calculated the revenue of its sewage operations based on water sales to its customers. Within this billing analysis Kentucky-American had typographical errors which caused minor calculation errors in its normalized revenue calculations. After making the necessary adjustments Staff calculated total normalized sewage revenue for the test period of $299,406.

B. Salaries and Wages. Kentucky-American reported a test-year level of Salary and Wage expense of $68,546, which includes salaries of $66,566 and employee incentive pay of $1,980.

Pay Raises. Kentucky-American uses a direct time-reporting system that requires each employee to maintain a detailed time record that directly tracks the time worked and charged to each cost center. Per Commission Staff's request, Kentucky-American provided a schedule of all employees who were on its test-year payroll. According to Kentucky-American's schedule, only 13 of the 136 employees listed had directly billed time to the sewer-division cost center.

In 2014, Kentucky-American gave its nonunion employees a 3 percent wage increase on April 1.[10] Kentucky-American was contractually obligated to give its union employees a 2.5 percent wage increase on November 1, 2014.[11] As shown in the table below, Commission Staff calculates a pro forma salary and wage expense of $70,945 by applying the 2014 wage rates to the direct hours billed to the sewer division, which is an increase of $4,378 over the test-year level.

[10] Case No. 2012-00520, *Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year* (Ky. PSC Dec. 28, 2012), Application, Direct Testimony of Melissa Schwarzell at 5. Kentucky-American's nonunion April 1, 2014 wage increase was included in its projected salary and wage expense, which was not modified by the Commission in its Final Order (Ky. PSC Oct. 25, 2013).

[11] November 1, 2014 contract between Kentucky-American and Local Union 320 of the National Conference of Fireman and Oilers.

Position Title	2014 Wage Rate	Direct Hours Charged Regular	Overtime	Pro Forma Direct Sewer Salaries
Operations Generalist II (N)	22.74	37.00	11.00	$ 1,216
Supt Wtr Qlty & Envrn Cmpl	40.41	11.00	1.50	535
Technician Production (N)	24.64	2,081.00	81.00	54,270
Technician Production (N)	26.24	54.00	34.00	2,755
Specialist Maint Service (N)	26.23	138.00		3,620
Supvr Production	38.00	12.00		456
Supvr Production	31.72	198.50		6,296
Operations Generalist II (N)	21.11	8.00	5.50	343
Operations Generalist II (N)	21.17		8.00	254
Spec Wtr Qlty & Env Compl II	24.04	15.00		361
Specialist Maint Service (N)	25.95	19.00		493
Supt Opns II	38.00	6.00		228
Utility	23.56	5.00		118
Total				$ 70,945

Management Salary Allocation. Although Kentucky-American does not allocate any of the management staff salaries to the sewer division cost center, it does agree that it is appropriate to make such an allocation. In reviewing the employee schedule, Commission Staff notes that Kentucky-American's current payroll is $7,950,830, of which $745,379 is for management salaries and the remaining $7,205,451 is for the union and non-union employee salaries.

Commission Staff believes that the ratio of directly charged salaries of $70,945 to the total non-management payroll of $7,205,451 is an appropriate factor to use in allocating the management salaries to the sewer-division cost center. This ratio results in an allocation factor of 0.985[12] percent, which, when applied to the management salaries, produces an allocation of $7,342.[13] Since Kentucky-American operates two non-adjacent treatment plants providing sewer service to non-adjacent service

[12] $70,945 (Direct Billed Salaries) ÷ $7,205,451 (Salaries net of Management) = 0.985%.

[13] $745,379 (Management Salaries) x 0.985% (Allocation Factor) = $7,342.

territories and its management staff is not a majority owner of the utility, utilizing an allocation percentage is reasonable.

Incentive Compensation. As previously mentioned, Kentucky-American recorded a test-year expense of $1,980 related to employee incentive compensation. In Case No. 2004-00103, the Commission denied the recovery of incentive compensation for Kentucky-American, finding that Kentucky-American failed to produce any evidence that incentive compensation motivates employees to perform better and that "[t]he mere existence of such plans is insufficient to demonstrate they benefit ratepayers and that their costs should be recovered through rates."[14] In Kentucky-American's next proceeding, Case No. 2010-00036,[15] the Commission determined that the incentive plan evaluations were weighted to Kentucky-American's financial goals, and if those goals were unmet, the incentive plan would be unfunded and employees would receive no incentive award, regardless of how well he or she met the customer-satisfaction or service-quality goals. To coincide with these prior decisions, Commission Staff is reducing operating expenses by $1,980 to eliminate the cost of the employee incentive plans.

Adjustment Apportionment. Commission Staff is proposing an overall increase to test-year salaries and wages expense of $9,740.[16] Kentucky-American recorded its test-year salaries and wages expense into five separate operating expense

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[14] *See* Case No. 2004-00103, *Adjustment of Rates of Kentucky-American Water Company* (Ky. PSC Feb. 28, 2005), Final Order at 49.

[15] *See* Case No. 2010-00036, *Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year* (Ky. PSC Dec. 14, 2010), Final Order at 29-33.

[16] $4,378 (2014 Wage Increases) + $7,342 (Management Salary Allocation) - $1,980 (Annual Employee Incentive Plan) = $9,740.

accounts. Using the test-year salary account percentages, Commission Staff is adjusting these five operating expense accounts as shown in the following table:

Acct #	Account Titled	Reported Salaries	Percentage	Pro Forma Adjustment	
701-B	Pumping System - Labor, Matl.s, & Exp.	$ 57,451	86.343%		$ 3,780
701-C	Other - Labor, Materials, and Exp.	951	1.430%		63
712	Maint. - Collection System	474	0.713%		31
713	Maint. - Pumping System	112	0.169%		7
920	Administrative and General Salaries	7,549	11.345%	497	
	Allocation Management Salaries			7,342	
	Employee Incentive Pay			(1,980)	
	Net Admin. And Gen Salary Adj.				5,859
Net Salaries and Wages Adjustment		$ 66,537			$ 9,740

C. Miscellaneous – Treatment and Disposal. Kentucky-American reported a test-year level of Miscellaneous – Treatment and Disposal expense of $41,461. In reviewing the test-year invoices, Commission Staff discovered that Kentucky-American had incorrectly expensed the cost of a sewer tap-on and lateral installation of $3,180. The sewer tap-on and lateral installation is considered a capital expenditure that should be depreciated, rather than recorded as an expense. Commission Staff is reducing Kentucky-American's Miscellaneous – Treatment and Disposal expense by $3,180. The depreciation of the tap-on and lateral is contained in section H below.

D. Maintenance – Treatment and Disposal. Kentucky-American reported a test-year level of Maintenance – Treatment and Disposal expense of $23,288. In reviewing the test-year invoices, Commission Staff discovered that Kentucky-American had incorrectly expensed the cost of a new $3,347 phase monitor. The installation of a new phase monitor is considered a capital expenditure that should be depreciated, rather than recorded as an expense. Commission Staff is reducing Kentucky-American's Maintenance – Treatment and Disposal expense by $3,347. The depreciation of the new phase monitor is contained in section H below.

E. <u>Support Services</u>. In the test year, the American Water Works Service Company ("AWWSC") billed Kentucky-American $9,163,842 for providing various support services. The AWWSC support services include "the use of centralized call centers, water quality testing lab, information technology support, accounts payable and accounts receivable, tax support and insurance as well as corporate governance."[17]

Although Kentucky-American does not allocate any of the support services cost to the sewer-division cost center, it agrees that such an allocation is appropriate. Kentucky-American explained that AWWSC had conducted an extensive study of the call volumes and costs and concluded that there was a slight increase in the administration of the call center for a combined water and sewer customer versus only a water customer. This slight increase is reflected in the billing formula used by the AWWSC call center that counts a combined sewer and water customer as 1.05 customers versus a single water customer.

Commission Staff believes that the formula used by the call center would be an appropriate allocation factor for all of the AWWSC costs, in that a combined water and sewer customer should not significantly impact the costs that are incurred by AWWSC or billed to Kentucky-American. Counting each of the 718 test-year sewer customers as 0.05 results in an allocation factor of 0.029 percent.[18] Applying a 0.029 percent

[17] *See* Case No. 2012-00520, *Kentucky-American Water Company* (Ky. PSC Oct. 25, 2013), Final Order at 36.

[18] 718 (Sewer Customers) x 0.05 (Factor) = 35.9 + 125,628 (Water Customers) =125,663.9. 35.9 ÷ 125,663.9 = 0.029%.

allocation factor to the AWWC-billed support services, net of lab costs,[19] of $9,017,630 results in allocation to the sewer cost center of $2,615.

F. Insurance. In the test year, Kentucky-American reported an insurance expense of $1,527.[20] In reviewing the general ledger, Commission Staff noted that Kentucky-American allocated a portion of its workers' compensation premium to its sewer-division cost center, but failed to allocate any of Kentucky-American's general liability premium. Kentucky-American acknowledged that its sewer division does impact the general liability premium and suggested that the ratio of plant investment would be an appropriate allocation factor.

Using the current premiums for workers compensation and general liability, the Commission Staff calculates a pro forma insurance expense of $2,801, as shown in the table below. Commission Staff is increasing the Insurance expense by $1,274.

Workers' Compensation Premium		181,096	
Multiplied by: Salary Allocation Factor		0.985%	
Workers Compensation Premium - Sewer			1,784
General Liability Premium		226,580	
Net Plant Investment - Sewer Division	2,162,801		
Divided by: Total Net Plant Investment	482,151,886		
Allocation Factor - General Liability Premium		0.449%	
General Liability Premium - Sewer Division			1,017
Pro Forma Insurance Expense			2,801

G. Employee Pensions and Benefits. Kentucky-American reports a test-period level of Employee Pensions and Benefits expense of $35,102. Using the current employee health insurance premiums, and the pro forma salaries and wages

[19] Kentucky-American's sewer division uses in state testing facilities. Therefore, the costs billed to Kentucky-American for the Bellville Lab located in Bellville, Illinois of $146,211 was removed from the total AWWSC support service costs of $9,163,842.

[20] This Insurance expense was not included in the amount for Support Services.

determined reasonable herein, Commission Staff calculates a pro forma level of Employee Pensions and Benefits expense of $38,706. Commission Staff is increasing Employee Pensions and Benefits expense by $3,604.

H. Depreciation. Kentucky-American reported $266,707 for test-year Depreciation expense. Commission Staff is proposing to increase the depreciation expense by $231[21] to reflect depreciation over the estimated useful lives of the capital expenditures removed from operating expenses.

I. Payroll Taxes. Kentucky-American reports a test-year Payroll Tax expense of $12,484, which includes Federal Insurance Contributions Act ("FICA") taxes of $4,817. Applying the current FICA tax rate of 7.65 percent to the pro forma employee salaries of $78,287, Commission Staff has determined that Payroll Tax expense should be increased by $1,172.[22]

J. Interest Synchronization. Kentucky-American proposes a pro forma interest expense of $48,137, based on the sewer division's net investment rate base ("rate base"), the capital structure for the combined divisions, and the weighted cost of debt. Kentucky-American is applying its weighted cost-of-debt to the sewer division's rate base, which is commonly referred to as interest synchronization. Interest synchronization limits the recovery of interest expense to the level of debt that is actually supporting the sewer division's rate base investment. This is the methodology

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[21] $3,180 (Sewer Tap and Lateral) ÷ 50 (Years) =	$ 64
$3,347 (Phase Monitor) ÷ 20 (Years)=	+ 167
Depreciation Adjustment	$ 231

[22] $78,287 (Salaries) x 7.65% (FICA Rate) = $5,989 - $4,817 (Test-Year FICA) = $1,172.

the Commission has historically used to calculate Kentucky-American's interest expense.[23]

Rate Base. Kentucky-American calculated a test-year rate base for its sewer division of $1,494,951. Upon review of Kentucky-American's proposed rate base, Commission Staff noted that cash working capital and deferred income taxes were excluded. Kentucky-American explained that in an attempt to simplify its application, it did not perform a lead/lag study to calculate a cash working capital allowance or attempt to calculate the deferred income taxes that would be reported by its sewer division.

Commission Staff agrees with Kentucky-American that a lead/lag study is overly complicated for an alternate rate filing application. However, the 45-day or 1/8 formula approach frequently used by the Commission has been widely accepted because "it was determined to be a reasonable estimate of what a lead-lag study would produce without the related expense of a lead-lag study."[24] The 1/8 formula approach is an alternate method that has been historically accepted by this Commission, is easy to apply, and will result in a reasonable cash working capital allowance. Using the 1/8 formula method for Kentucky-American's sewer division, Commission Staff calculates a cash working capital allowance of $36,346.[25]

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[23] *See* Case No. 2012-00520, *Kentucky-American Water Company* (Ky. PSC Oct. 25, 2013), Final Order at 40, and Case No. 2010-00036, *Kentucky-American Water Company* (Ky. PSC Dec. 14, 2010), Final Order at 54.

[24] *Accounting for Public Utilities* (by Robert L. Hahne and Gregory E. Aliff Deloitte & Touche, Revision Release 7, December 1990) at 5-7.

[25] $290,766 (Pro Forma Operation and Maintenance Expenses) x .125 (1/8 Formula) = $36,346.

At the end of calendar year 2013, Kentucky-American reported an accumulated deferred income tax balance of $65,290,648 for its combined operations.[26] Commission Staff requested Kentucky-American to identify the amount of the reported accumulated deferred income taxes that would be attributable to the accelerated depreciation of the sewer division's assets. Using the net book and the net tax basis for its sewer division's utility plant in service as of December 31, 2013, Kentucky-American calculated an accumulated deferred income tax balance for its sewer division of $483,577. Having reviewed the supporting workpaper, Commission Staff believes that Kentucky-American's calculation is correct.

Including cash working capital of $36,346 and deferred income taxes of $483,577, Commission Staff calculates a test-year rate base for the sewer division of $1,047,720 as shown in the table below:

Utility Plant in Service		4,045,610
Accumulated Depreciation		(1,909,267)
Accumulated Cost of Removal		26,457
Net Utility Plant in Service		2,162,800
Adds:	Working Capital Allowance	36,346
	Other Working Capital	6,446
Deducts:	Contribution In Aid of Construction	(674,295)
	Deferred Income Taxes	(483,577)
Net Original Cost Rate Base		1,047,720

Capital Structure. To calculate the weighted cost of debt, Kentucky-American used the "company-wide" capital structure that is shown in the table below. Upon review of the financial statements, Commission Staff believes that the company-

[26] *2013 Annual Report* at 14.

wide capital structure is appropriate to use to develop the weighted cost-of-debt for the sewer division.

Component of Capitalization	Per Books	Ratios	Job Develop Credit	Adjusted Capitalization
Short-Term Debt	$ 19,819,864	5.186%	$ 33,871	$ 19,853,735
Long-Term Debt	194,104,034	50.790%	331,717	194,435,751
Preferred Stock	4,482,334	1.173%	7,661	4,489,995
Common Equity	163,767,142	42.852%	279,866	164,047,008
Total Capitalization	$ 382,173,374	100.001%	$ 653,115	$ 382,826,489
JDITC		$ 653,115		

Weighted Cost-of-Debt. Kentucky-American calculated a weighted cost-of-debt of 3.22 percent. In reviewing Kentucky-American's calculation, Commission Staff determined that the preferred stock dividend was mistakenly included as a cost-of-debt. Correcting for this error, Commission Staff calculates a weighted cost-of-debt of 3.12 percent. The table below compares Kentucky-American and Commission Staff's weighted cost-of-debt calculations.

Component of Capitalization	Ratios	Returns	Weighted Cost of Debt	
			KAWC	Staff
Short-Term Debt	5.186%	0.3570%	0.02%	0.02%
Long-Term Debt	50.790%	6.1000%	3.10%	3.10%
Preferred Stock	1.173%	8.5200%	0.10%	
Common Equity	42.852%			
Total Capitalization	100.001%		3.22%	3.12%

Interest Expense. Applying the weighted cost of debt of 3.12 percent to the rate base it calculated of $1,047,720, Commission Staff calculates an interest expense of $32,689.[27]

Determination of Allowable Net Operating Income ("NOI")

Kentucky-American calculated an allowable NOI for its sewer division using the operating ratio method as historically accepted by the Commission.[28] Pursuant to this method, the allowable NOI is calculated by dividing pro forma operating expenses by 88 percent and subtracting operating expenses from the result. Using this method, Staff calculated an allowable NOI for Kentucky-American's sewer division of allowable NOI to be $50,933, as shown below:

Operating Expenses	$	373,510
Divide by: Operating Ratio		88.00%
Operating Revenues		424,443
Less: Operating Expenses		(373,510)
Allowable NOI	$	50,933

Calculation Overall Revenue Requirement and Required Revenue Increase

[27] $1,047,720 (Commission Staff Rate Base) x 3.12% (Weighted Cost-of-Debt) = $32,689.

[28] An operating ratio measures the difference between operating revenues and operating expenses. It is defined by the following equation.

$$\text{Operating Ratio} = \frac{\text{Operation \& Maintenance Exp.} + \text{Depreciation} + \text{Taxes}}{\text{Gross Revenues}}$$

The Commission has found that the operating ratio is a reasonable and necessary alternative to the rate of return method for calculating the allowable NOI for small-sewer investor-owned utilities. Specifically, it has found that the rate-of-return method cannot be used because there is "no basis" upon which to determine a rate of return for these utilities, Administrative Case No. 95-236, *Application of Thelma Waste Control, Inc. for a Rate Adjustment Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC. Apr. 15, 1996), Final Order at 6. Further, it has found that the operating ratio method is appropriate when plant investment is low and operating expenses are high, Case No. 7982, *Notice of Application of Fern Lake Company* (Ky. PSC. Aug. 27, 1981), Final Order at 3.

To recover all pro forma operating expenses and to generate the allowable NOI, Kentucky-American's sewer division requires overall revenue of $489,559. As shown in the table below, a revenue increase of $185,648, or 62 percent, is necessary to produce the overall revenue requirement.

Net Income Allowable		$	50,933
Add:	Provision For State and Federal Income Taxes		32,427
	Interest Expense		32,689
	Pro Forma Operating Expenses before Income Taxes		373,510
Overall Revenue Requirement			489,559
Less:	Other Operating Revenue		(4,505)
Revenue Requirement - Sewer Rates			485,054
Less:	Normalized Revenue from Sewer Service		(299,406)
Justified/Recommended Increase in Revenue from Rates		$	185,648
% Increase			62.005%

Signatures

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ATTACHMENT
STAFF REPORT, CASE NO. 2014-00390
Commission Staff's Proposed Rates

Monthly Sewage Rates

PHASE 1

Owenton – Inside City Rates

			Per 1,000 gallons		Per ccf	
First	2,000	gallons	$22.10	Minimum bill	$22.10	Minimum bill
Next	1,000	gallons	10.04	per 1,000 gallons	7.53	per ccf
Next	2,000	gallons	7.90	per 1,000 gallons	5.925	per ccf
Next	5,000	gallons	7.16	per 1,000 gallons	5.37	per ccf
Next	10,000	gallons	6.40	per 1,000 gallons	4.80	per ccf
Next	20,000	gallons	5.64	per 1,000 gallons	4.23	per ccf
Over	40,000	gallons	5.38	per 1,000 gallons	4.3504	per ccf

Owenton – Outside City Rates

			Per 1,000 gallons		Per ccf	
First	2,000	gallons	$24.18	Minimum bill	$24.18	Minimum bill
Next	1,000	gallons	10.98	per 1,000 gallons	8.235	per ccf
Next	2,000	gallons	8.65	per 1,000 gallons	6.4875	per ccf
Next	5,000	gallons	7.82	per 1,000 gallons	5.865	per ccf
Next	10,000	gallons	6.99	per 1,000 gallons	5.2425	per ccf
Next	20,000	gallons	6.17	per 1,000 gallons	4.6275	per ccf
Over	40,000	gallons	5.88	per 1,000 gallons	4.41	per ccf

Rockwell Village

First	12,000	gallons	$26.56	Minimum bill
Over	12,000	gallons	22.13	per 1,000 gallons

PHASE 2

Owenton – Inside and Outside City Rates

			Per 1,000 gallons		Per ccf	
First	2,000	gallons	$28.29	Minimum bill	$28.29	Minimum bill
Next	1,000	gallons	12.85	per 1,000 gallons	9.6375	per ccf
Next	2,000	gallons	10.11	per 1,000 gallons	7.5825	per ccf
Next	5,000	gallons	9.16	per 1,000 gallons	6.87	per ccf
Next	10,000	gallons	8.19	per 1,000 gallons	6.1425	per ccf
Next	20,000	gallons	7.22	per 1,000 gallons	5.415	per ccf
Over	40,000	gallons	6.89	per 1,000 gallons	5.1675	per ccf

Rockwell Village

First	12,000	gallons	$34.00	Minimum bill
Over	12,000	gallons	28.30	per 1,000 gallons

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