

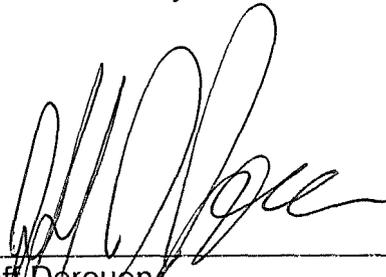
COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF SYMSONIA WATER )  
DISTRICT FOR APPROVAL OF A CERTIFICATE )  
OF PUBLIC CONVENIENCE AND NECESSITY ) CASE NO.  
FOR CONSTRUCTION OF WATER FACILITIES, ) 2012-00517  
FINANCING AND INCREASED RATES FOR )  
WATER AND SEWER SERVICE )

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of January 29, 2013, the attached report containing the findings and recommendations of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding.



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

DATED APR 01 2013

cc: Parties of Record

STAFF REPORT  
ON  
SYMSONIA WATER DISTRICT  
CASE NO. 2012-00517

Symsonia Water District ("Symsonia District"), a water district organized pursuant to KRS Chapter 74, provides water service to 319<sup>1</sup> customers and wastewater service to 264 customers<sup>2</sup> in Graves County, Kentucky. On November 29, 2012, it filed an application with the Commission seeking approval of:

- 1) A Certificate of Public Convenience and Necessity to Construct a Water Treatment Plant with an estimated cost of \$895,000;
- 2) Financing for the water treatment plant which includes a \$300,000 loan from the Kentucky Infrastructure Authority;
- 3) An increase to water service rates of 32.2 percent to produce \$23,000 in additional annual water revenues; and
- 4) An increase to sewer service rates of 10 percent to produce \$8,141 in additional annual sewer revenues.

The application was considered filed on January 29, 2013, when all filing requirements were met. Staff provides recommendations regarding the rates requested by Symsonia in this report.

The requested water rates would increase the monthly bill for 5,000 gallons of water from \$20.38 to \$26.96, an increase of \$6.58, or 32.2 percent. The requested

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<sup>1</sup> *Annual Report of Symsonia Water District (Water Division) to the Public Service Commission for the Calendar Year Ended December 31, 2011* at 21.

<sup>2</sup> *Annual Report of Symsonia Water District (Sewer Division) to the Public Service Commission for the Calendar Year Ended December 31, 2011* at 8.

sewer rates would increase a flat monthly bill from \$25.64 to \$28.21, an increase of \$2.57, or 10 percent.

In support of its requested rates, Symsonia District provided financial exhibits in its application based on adjusted test-year operations ending December 31, 2011. These exhibits, which are presented in condensed form below, demonstrate that annual revenue increases are justified for the Water Division in the amount of \$65,322, or 88.8 percent, and for the Sewer Division in the amount of \$42,975, or 51.4 percent.<sup>3</sup>

#### Water Division

Total Operating Expenses	\$ 120,539
Add: KIA Principal and Interest Payments	<u>18,443</u>
Revenue Requirement	138,982
Less: Pro Forma Present Rate Revenues	(73,528)
Interest Income	<u>(132)</u>
Justified Increase	<u>\$ 65,322</u>
Percentage	<u>88.8%</u>

#### Sewer Division

Total Operating Expenses	\$ 111,518
Divide by: Operating Ratio	<u>88%</u>
Revenue Requirement	126,725
Less: Pro Forma Present Rate Revenues	(83,568)
Interest Income	<u>(182)</u>
Justified Increase	<u>\$ 42,975</u>
Percentage	<u>51.4%</u>

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<sup>3</sup> The fully disclosed exhibits are shown in the App. at Ex. 3, 4, and 5.

Symsonia District requested to recover only a portion of the justified increases. It requested water rates that would increase annual revenues by \$23,000, or 32.2 percent, and requested sewer rates that would increase annual revenues by \$8,141, or 10.0 percent.

To evaluate the reasonableness of the rates requested by Symsonia District, Commission Staff ("Staff") performed a limited financial review of Symsonia District'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 have a material effect. Insignificant or immaterial discrepancies were not pursued.

Staff's findings and recommendations are summarized in this report. Daryl Parks reviewed the calculation of revenue requirements. Jason Green reviewed the billing analysis, reported revenues, and the allocation of the revenue increase to the rate design. This report is separated into the following sections:

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Recommendations

1) Rates. Staff applied the operating-ratio method to calculate the overall revenue requirement for Symsonia District's Water Division and Sewer Division to be \$105,997 and \$122,598 respectively. To generate these requirements, rates must be

adjusted to generate \$32,287 in additional water revenues and \$38,848 in additional sewer revenues.

The water rates set forth in Attachment A to this report will produce the additional annual water revenues. These rates will increase the monthly cost of 5,000 gallons of water from \$20.38 to \$29.61, an increase of \$9.23, or 45.29 percent. The sewer rates set forth in Attachment B will produce the additional annual sewer revenues. These rates will increase the flat monthly sewer rate from \$25.64 to \$37.91, an increase of \$12.27, or 47.85 percent.

2) General Accounting, Depreciable Lives. In this report, Staff recommends changes to the depreciable lives assigned to many of Symsonia District's water assets and sewer assets for rate-making purposes. Staff recommends that the Commission require Symsonia District to use these lives for accounting purposes in all future reporting periods. These lives better match the life expectancy of Symsonia District's assets and will better match expenses to the revenues generated by the water service rates and the sewer service rates approved by the Commission in this proceeding. This action will minimize the erosion of equity. No adjustment to accumulated depreciation and retained earnings should be made to account for the retroactive effect of this change in accounting estimate.

3) General Accounting, Internal Controls. Absent the forgoing changes to internal controls, subsidization between the Water Division and the Sewer Division may occur and not be detected. Symsonia District maintains only one general ledger for its Water Division and Sewer Division wherein it records all transactions for both divisions.

Separate accounting of all transactions for each division is maintained within the general ledger except for cash. Cash is commingled.

Separate cash accounts must be maintained and all cash transactions accounted for separately to comply with the Uniform System of Accounts (“USoA”) applicable to Symsonia District.<sup>4</sup> Symsonia District should comply with the requirements of the USoA and separate the accounting for cash. Symsonia District should consider maintaining a separate general ledger for each division. Separate ledgers are not required but would strengthen internal controls.

Also, as noted throughout the remaining sections of this report, rate-making adjustments were necessary to properly allocate many test-year transactions that were shared by the divisions. In future reporting periods, allocation of shared transactions should be made using reasonable allocation factors and methods. These factors and methods should be documented in Symsonia District’s written accounting policies and procedures that are approved by its Board of Commissioners. Symsonia District may adopt the methods applied by Staff in this report.

#### Pro Forma Operating Statements

Symsonia District reported test-year operating revenues of \$81,915, and operating expenses of \$90,706 for its Water Division. The Sewer Division reported operating revenues of \$82,552 and operating expenses of \$111,518. Symsonia District proposed adjustments to the test-year amounts for changes that were known and

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<sup>4</sup> USoA for Water Districts and Associations, Accounting Instruction 15 at 18 and USoA for Sewer Utilities, Accounting Instruction 13 at 17.

measurable.<sup>5</sup> The adjustments recommended by Staff are detailed below in the Pro Forma Operating Statements for each division.

Water Division  
Pro Forma Operating Statement

	Test Year	Adjustments	Ref.	Pro forma
Operating Revenue				
Metered Sales	\$ 81,038	\$ (9,719)	A	\$ 71,319
Other Water Revenue	877	1,332	B	2,209
	<u>81,915</u>	<u>(8,387)</u>		<u>73,528</u>
Total Operating Revenue				
Operating Expenses				
Operation and Maintenance				
Salaries and Wages - Employees	37,487	4,829	C	42,316
Purchased Power	3,262			3,262
Chemicals	6,780			6,780
Materials and Supplies	7,225	(841)	D	6,384
Contractual Services	3,810			3,810
Insurance	5,229			5,229
Regulatory Commission Expense	132			132
Miscellaneous	5,209	1,105	E	6,314
	<u>69,134</u>	<u>5,093</u>		<u>74,227</u>
Total Operation and Maintenance Expense				
Depreciation	21,572	(2,521)	F	19,051
	<u>90,706</u>	<u>2,572</u>		<u>93,278</u>
Total Operating Expenses				
Net Operating Income	(8,791)	(10,959)		(19,750)
Interest and Dividend Income	182			182
	<u>182</u>			<u>182</u>
Income Available to Service Debt	<u>\$ (8,609)</u>	<u>\$ (10,959)</u>		<u>\$ (19,568)</u>

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<sup>5</sup> App. Ex. 3.

Sewer Division  
Pro Forma Operating Statement

	Test Year	Adjustments	Ref.	Pro forma
Operating Revenue				
Flat Rate Revenues	\$ 80,212	\$ 1,016	A	\$ 81,228
Other Sewer Revenue	2,340			2,340
Total Operating Revenue	<u>82,552</u>	<u>1,016</u>		<u>83,568</u>
Operating Expenses				
Operation and Maintenance				
Salaries	37,487	(7,059)	C	30,428
Purchased Fuel and Power	11,834			11,834
Chemicals	4,291			4,291
Disposal - Materials and Supplies	9,948	(1,389)	D	8,559
Maintenance Fee - Contractual Services	1,501			1,501
Insurance	5,229			5,229
Regulatory Commission Expense	132			132
Uncollectible Accounts	36			36
Miscellaneous Expenses	7,125	(1,105)	E	6,020
Total Operation and Maintenance Expense	77,583	(9,553)		68,030
Depreciation	33,935	5,920	F	39,855
Total Operating Expenses	<u>111,518</u>	<u>(3,633)</u>		<u>107,885</u>
Net Operating Income	(28,966)	4,649		(24,317)
Interest and Dividend Income	182			182
Income Available to Service Debt	<u>\$ (28,784)</u>	<u>\$ 4,649</u>		<u>\$ (24,135)</u>

(A) Water Sales Revenues and Sewer Sales. Symsonia's 2011 annual report reported revenues from water sales of \$81,038, while the test-period billing analysis showed revenues from water sales to be only \$71,319, a difference of \$9,719. This discrepancy is due in large part to a clerical error in which water penalties that were shown on a customer's bill were reported as revenue but not actually billed and received. This amount accounted for \$7,145.80 of the difference in what was reported in the annual report and the billing analysis. \$2,080.50 in reported revenues from water

sales was found actually to represent monies received from tap-on fees and not actual water sales. For the purposes of this report, the normalized revenues from water sales should be \$71,319, as supported by the billing analysis. The revenues from sewer sales were calculated by multiplying the current number of customers (264) by the current rate (\$25.64) and by 12 months. This generates normalized revenue from sewer sales of \$81,228.

(B) Other Operating Revenue. An adjustment of \$1,332 was made to reflect forfeited discounts that were not shown as other operating revenue in the Water Division's annual report. No adjustment to other sewer revenues are required.

(C) Salaries. During the test year, Symsonia District employed two full-time employees and four part-time employees to operate both divisions. Test-year wages and payroll taxes for all employees totaled \$74,974. One half of this amount, \$37,487, was allocated to each division and reported as a test-year expense of that division. There is no basis for Symsonia District's allocation method. It simply splits wages and payroll taxes evenly between the divisions.

As shown below, Staff recommends that the test-year expense for the Water Division be increased by \$4,829 and that the test-year expense of the Sewer Division be decreased by \$7,059 to reallocate the test-year wages and payroll taxes using reasonable allocation methods and to capitalize a portion of the expenses incurred to construct new service connections made during the test year.

		<u>Allocated to</u>	
	Test Year	Water Division	Sewer Division
Wages and Payroll Taxes, Office	\$ 27,224	\$ 14,896	\$ 12,328
Wages and Payroll Taxes, Field	47,750	28,650	19,100
Total	<u>\$ 74,974</u>	43,546	31,428
Less: Capitalized Labor		(1,230)	(1,000)
Pro Forma Wage and Payroll Tax Expense		42,316	30,428
Less: Test Year		(37,487)	(37,487)
Adjustments		<u>\$ 4,829</u>	<u>\$ (7,059)</u>

Reallocation of Test-Year Expense. One full-time employee and two part-time employees performed field operations while the remaining employees performed office and administrative duties. Total test-year wages and payroll taxes reported for field employees were \$47,750. The amount reported for office employees was \$27,224.

Ideally, field employees would use direct-time reporting to directly charge actual time worked to the appropriate division.<sup>6</sup> Absent actual data, estimates must be made. Based on interviews with Symsonia District field employees, Staff estimated that 60 percent of all field employee work hours were dedicated to water operations while 40 percent was dedicated to sewer operations. Staff used this estimate to allocate field employee wages and taxes between the divisions as shown below.

Water Division	60%	\$ 28,650
Sewer Division	40%	19,100
Total	<u>100%</u>	<u>\$ 47,750</u>

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<sup>6</sup> Through direct time reporting employees separately report actual hours worked for each division on a daily timecard. The timecards are then used to pay wages and taxes from the appropriate division.

It is not practical for office employees to use direct time reporting. The majority of their time is spent performing administrative duties for both divisions simultaneously. It would be difficult to accurately track, separate, and charge this time to the appropriate division or to estimate the time dedicated to each division. Staff recommends allocating office employee expenses based on the number of customers served by each division. This method should fairly represent, in all material respects, the office employees time dedicated to each division. The allocation factor is calculated below.

	Number of Customers	Allocation Factor
Water Division	319	54.72%
Sewer Division	264	45.28%
	<u>583</u>	<u>100%</u>

Using the number-of-customers allocation factor the office wages and taxes was allocated as follows.

Water Division	54.72%	\$ 14,896
Sewer Division	45.28%	12,328
	<u>100%</u>	<u>\$ 27,224</u>

Capitalization. Staff decreased the Salaries expense for the Water Division by \$1,230 to capitalize test-year labor costs that were incurred to install four new water connections and decreased the Sewer Division's expense by \$1,000 to capitalize the labor costs to install two new sewer connections.<sup>7</sup>

(D) Materials and Supplies. The Materials and Supplies expense accounts reported by the Water Division and the Sewer Division include items used by field employees that were not shared by the divisions. These items were directly assigned to the proper division when incurred and reported as an expense of only that division. No adjustment is required to reallocate these items.

Test-year Materials and Supplies expense also include shared field supplies that were split evenly between the divisions. Since these items were used by field employees, they are best allocated using the field employee-wage allocation factor. Staff recommends an adjustment to account for proper allocation of these shared expenses. This adjustment, along with the adjustment to capitalize materials and supplies used to install new services,<sup>8</sup> is shown below.

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<sup>7</sup> The total amount capitalized for the water connections and sewer connections is \$2,460 and \$2,000, respectively. These amounts were calculated by multiplying the number of new connections by the amount of Symsonia District's tap-on fees. This method is appropriate, since the tap-on fees are cost-based and designed to recover all costs incurred to install a new connection. These costs include wages, payroll overhead charges, materials and supplies, transportation costs, insurance, and depreciation. Ideally, the capitalization adjustment would be spread over all of these expense accounts, but for simplicity, the adjustment was split evenly between salaries and wages expense and materials and supplies expense.

<sup>8</sup> *Id.*

	Water Division	Sewer Division	Total
Directly Assigned	\$ 5,282	\$ 8,005	\$ 13,287
Allocated 60/40	2,332	1,554	3,886
	<hr/>		
Total	7,614	9,560	17,173
Less: Capitalization for New Connections	(1,230)	(1,000)	(2,230)
	<hr/>		
Pro Forma	6,384	8,560	14,943
Less: Test Year	(7,225)	(9,948)	(17,173)
	<hr/>		
Adjustment	\$ (841)	\$ (1,389)	\$ (2,230)
	<hr/>		

(E) Miscellaneous Expense. The Water Division and Sewer Division reported test-year miscellaneous expenses of \$5,209 and \$7,125, respectively. Staff agrees that \$717 of the water expense and that \$1,388 of the sewer expense is properly assigned to each division. Staff made no adjustments to these amounts.

The remaining expenses were shared by the divisions and were either allocated evenly between the divisions or assigned only to one division. These administrative and general expenses are best allocated using the number-of-customers allocation factor. Accordingly, Staff recommends the adjustments shown below to account for proper allocation.

	Test Year			Amount Allocated	
	Water Division	Sewer Division	Total	Water Division 54.72%	Sewer Division 45.28%
Office Supplies	\$ 2,816	\$ 2,816	\$ 5,632	\$ 3,082	\$ 2,550
Telephone	1,053	1,053	2,106	1,152	954
Mileage	443	443	886	485	401
Utilities		1,425	1,425	780	645
Bank Charges	80		80	44	36
Petty Cash	100		100	55	45
Total	<u>\$ 4,492</u>	<u>\$ 5,737</u>	<u>\$ 10,229</u>	5,597	4,632
Less: Test Year				<u>(4,492)</u>	<u>(5,737)</u>
Adjustment				<u>1,105</u>	<u>(1,105)</u>

(F) Depreciation. Symsonia District reported test-year water depreciation expense of \$21,572 and sewer depreciation of \$33,935. It proposed to increase water depreciation by \$29,834 to account for the additional expense that will begin after the new water treatment plant becomes operational. It did not propose to adjust sewer depreciation.

Symsonia District estimates the new water plant's earliest possible date of operation will be December, 2013. Depreciation of this plant will not begin until after it is placed into service. Recovery of depreciation through rates should not begin until it is recognizable and reported as an expense. The rates approved by the Commission in this case will become effective well before the plant is placed into service. These rates should not include recovery of its depreciation. Staff recommends that adjustment be denied.

Staff recommends that the test-year depreciation expense reported by the Water Division be decreased by \$2,521 and amount reported by the Sewer Division be increased by \$5,920 to account for:

- 1) changes to the depreciable lives of certain asset account groups that are recommended by the Commission's Division of Engineering;
- 2) depreciation of the cost of the new water connections and new sewer connections made during the test year that were capitalized by Staff; and
- 3) the allocation of test-year depreciation on assets shared by the Water Division and Sewer Division.

The calculation of Staff's adjustments is detailed below with changes to the test-year amounts highlighted in bold print:

	Life	Original Cost		Pro Forma Depreciation Expense		
		Shared Assets	Water Division	Sewer Division	Water Division	Sewer Division
<u>Water Assets:</u>						
Structures and Improvements	39		\$ 72,511		\$ 1,859	
Structures and Improvements	39		49,938		1,280	
Pumping Equipment	20		7,462		373	
Water Treatment Equipment	31.5		92,692		2,943	
Distribution Reservoirs	39		62,410		1,600	
Transmission & Distribution Main	<b>62.5</b>		289,159		<b>4,627</b>	
<b>New Services Installed during Test Year</b>	<b>40</b>		<b>2,460</b>		<b>62</b>	
<u>Sewer Assets:</u>						
Structures and Improvements	39		\$ 4,138		\$ 106	
Structures and Improvements	39		29,083		746	
Structures and Improvements	39		53,518		1,372	
Service to customers	39		23,460		602	
<b>New Services Installed during Test Year</b>	<b>39</b>		<b>2,000</b>		<b>51</b>	
Pumping - Receiving Wells	31.5		30,189		958	
Pumping - Pumping Equipment	<b>7</b>		70,441		10,063	
Oxidation Lagoon	<b>25</b>		75,504		3,020	
Treatment and Disposal	<b>10</b>		3,734		373	
Outfall Sewer (Mains)	<b>39</b>		537,800		<b>13,790</b>	
<b>DAF Unit</b>	39		<b>100,000</b>		<b>2,564</b>	
<b>Housing for DAF Unit</b>	39		<b>72,418</b>		<b>1,857</b>	
<u>Shared Assets:</u>		<u>Allocation of Shared Assets</u>				
Administrative						
<b>Headquarters, Office</b>	<b>20</b>	\$ 24,139	<b>13,208</b>	<b>10,931</b>	<b>660</b>	<b>547</b>
Office Furniture & Equipment	20	6,354	3,477	2,877	174	144
Office Improvements	35	5,176	2,832	2,344	81	67
Field						
<b>Headquarters, Warehouse</b>	39	144,835	<b>86,901</b>	<b>57,934</b>	<b>2,228</b>	<b>1,485</b>
Tools & Shop	20	1,182	709	473	35	24
Power Operated Equipment	15	18,954	11,372	7,582	758	505
Other Tangible Plant	10	1,359	815	544	82	54
Power Equipment	10	5,500	3,300	2,200	330	220
Shop	39	5,295	3,177	2,118	81	54
Asphalt	15	6,875	4,125	2,750	275	183
Store Equipment	20	475	285	190	14	10
Transportation Equipment	7	11,531	6,919	4,612	988	659
Trencher	15	15,000	9,000	6,000	600	400
			<u>\$ 722,753</u>	<u>\$ 1,102,840</u>	19,051	39,855
Less: Test Year					(21,572)	(33,935)
Adjustment					<u>\$ (2,521)</u>	<u>\$ 5,920</u>

Depreciable Lives. The depreciable lives of all assets were reviewed by the Commission's Division of Engineering. Their review and recommendations are

summarized in a memorandum that is included herewith at Attachment C. Staff applied the depreciable lives recommended in Attachment C to all assets that had a depreciable basis at the end of the test year to calculate pro forma water and sewer depreciation expense.<sup>9</sup>

New Connections. As previously discussed in the adjustments to test-year Salaries and test-year Materials and Supplies, Staff capitalized the cost of new connections made to Symsonia's water system and sewer system during the test year. These capitalized costs were included in Staff's calculation of pro forma depreciation expense.

Allocation of Shared Assets. Shared assets include Symsonia District's headquarters building, office equipment, and field equipment. Adjustments are necessary to properly allocate depreciation taken on these assets between the divisions. Staff allocated depreciation taken on the office equipment using the number-of-customers allocation factor.<sup>10</sup> Allocation of depreciation on field equipment follows the field-employee allocation factor.<sup>11</sup> Allocation of depreciation on the headquarters building is complicated by the many uses of the building and because its original cost is combined with the cost of the Sewer Division's Dissolved Air Flotation ("DAF") unit.

The headquarters building is located at the wastewater treatment facility. It houses all administrative offices, all warehouse and storage facilities, and the DAF unit.

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<sup>9</sup> The Engineering Division reviewed the lives assigned to all asset groups listed in Exhibit 6 of the Application including those that had no depreciable basis at the end of the test year. These account groups are not included in Staff's calculation of pro forma depreciation expense.

<sup>10</sup> The calculation of the Number-of-Customers Allocation Factor is shown on page 11 of this report.

<sup>11</sup> Field employee expenses were allocated 60 percent to Water Division and 40 percent to the Sewer Division.

The combined cost of the building and DAF unit is stated at \$341,392.<sup>12</sup> To allocate this amount, Staff first removed the cost of the DAF unit, estimated by Symsonia District to be \$100,000. The remaining \$241,392 was separated based on the estimated percentage of square footage used at the headquarters building for office space, warehouse space, and to house the DAF unit. This separation is shown below.

<u>Allocation Headquarter's Original Cost</u>		
Office	10%	\$ 24,139
Warehouse	60%	144,835
Structure for DAF Unit	30%	<u>72,418</u>
Total		<u>\$ 241,392</u>

For depreciation purposes, the cost of office space was allocated to each division based on the number-of-customers allocation factor. The warehouse was allocated using the field-employee allocation factor. Housing for the DAF unit was directly assigned to the Sewer Division.

#### Calculation of Overall Revenue Requirement and Revenue Increase

Symsonia District applied the Cash Needs Method<sup>13</sup> to determine its Water

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<sup>12</sup> App. Ex. 6 at 1. This asset is labeled as Structures and Improvements, 1/1/82. All test-year depreciation was charge to the Sewer Division.

<sup>13</sup> The Cash Needs Method provides revenues sufficient to pay cash related operating expenses, pay principal and interest on all debts, and recover depreciation expense, a noncash item, to provide working capital. While the Kentucky Supreme Court has held that the Commission must permit a water district to recover depreciation expense through 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 Distr.* 720 SW.2d 725, 728 (Ky. 1986), neither the Court nor the Commission requires these funds to be set aside and used only for this purpose. These funds provide working capital that can be used to replace existing assets, construct new assets, offset increased operating expenses, or offset decreased revenues. In 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), the Commission required that depreciation funds be used to pay expenses incurred to purchase, pump, and treat water lost in excess of the 15 percent allowed by 807 KAR 5:066, Section 6(3).

Division’s overall revenue requirement to be \$138,982. Although it determined that a revenue increase of \$65,322, or 88.8 percent, is necessary to meet this requirement,<sup>14</sup> it requested to increase water sales revenue only by \$23,000, or 32.2 percent.

Symsonia District calculated its Sewer Division’s overall revenue requirement to be \$126,725 using the Operating Ratio Method.<sup>15</sup> It determined that a revenue increase of \$42,975, or 51.4 percent is necessary to meet this requirement but requested an increase of only \$8,141, or 10 percent.

Staff agrees that application of the Operating Ratio Method to the Sewer Division follows the Commission’s historic practice and should, therefore, be accepted. Staff disagrees with Symsonia District’s use of the Cash Needs Method for the Water Division. As explained below, Staff recommends that the Operating Ratio Method also be applied to calculate the revenue requirement for the Water Division.

Using the Cash Needs Method, Symsonia District calculated the Water Division’s overall revenue requirement by adding to pro forma operating expenses the anticipated \$18,423 annual payment to be made to KIA on the loan that will be used to finance a portion of the cost of the new water treatment facility. The first semiannual payment on

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<sup>14</sup> App. Ex. 3 at 1.

<sup>15</sup> The Operating Ratio Method is generally accepted by the Commission to calculate the revenue requirement of a water district or water association that has no outstanding long-term debts. The operating ratio is equal to the margin between the operating revenues and operating expenses authorized by the Commission. The margin is allowed to provide working capital above the amount provided through recovery of depreciation expense. The Commission has historically set the margin equal to 12 percent of operating revenues with adjustments made for certain “below-the-line” accounts. When no “below-the-line” accounts are reported, the formula appears as shown below.

Operating Revenues	100%
Less: Operating Expenses	<u>-88%</u>
Net Operating Income	<u><u>12%</u></u>

the KIA loan will become due six months after the facility becomes operational and is placed into service.<sup>16</sup> Rate recovery of the payment is not appropriate until the plant is placed into service. The rates approved by the Commission in this instance will become effective well before this date and should not include recovery of the KIA payment. After removing the KIA payment, there is no long-term debt to be included in revenue requirements. Use of the Operating Ratio Method is then appropriate.

As shown below, Staff applied the Operating Ratio Method to calculate the overall revenue requirement for the Water Division and the Sewer Division to be \$105,998 and \$122,597, respectively. Additional revenues of \$32,288 are necessary to meet the Water Division's revenue requirement and \$38,847 in additional revenues are required to meet the Sewer Division's requirement.

	Division	
	Water	Sewer
Operating Expenses	\$ 93,278	\$ 107,885
Divide by: Operating Ratio	88%	88%
Overall Revenue Requirement	105,998	122,597
Less: Other Operating Revenue	(2,209)	(2,340)
Interest Income	(182)	(182)
Revenue Required from Rates	103,607	120,075
Less: Pro Forma Present Rate Revenue	(71,319)	(81,228)
Revenue Increase	<u>\$ 32,288</u>	<u>\$ 38,847</u>

These additional revenues result in an operating ratio of 88.15 percent for the Water Division and 88.13 percent for the Sewer Division.

<sup>16</sup> As discussed in the adjustment to Depreciation Expense, the earliest expected date of operation is estimated to be December, 2013.

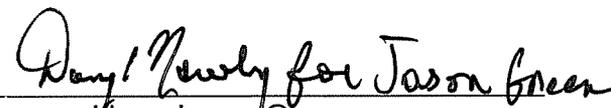
	<u>Division</u>	
	Water	Sewer
Operating Expenses	\$ 93,278	\$ 107,885
Divided by: Operating Revenue	<u>105,816</u>	<u>122,415</u>
Operating Ratio	<u>88.15%</u>	<u>88.13%</u>

### Rates and Rate Design

To calculate the rates to generate the revenue increase, Staff followed the method applied by Symsonia and increased current rates evenly across the board. This method allocates the revenue requirement to all customers in an equitable manner.

### Signatures

  
 \_\_\_\_\_  
 Prepared by: Daryl Parks  
 Public Utilities Financial Analyst III,  
 Water and Sewer Revenue  
 Requirements Branch  
 Division of Financial Analysis

  
 \_\_\_\_\_  
 Prepared by: Jason Green  
 Public Utilities Rate Analyst III,  
 Communications, Water  
 and Sewer Rate Design Branch  
 Division of Financial Analysis

ATTACHMENT A  
STAFF REPORT, CASE NO. 2012-00517  
STAFF'S RECOMMENDED RATES

Monthly Water Rates

5/8-Inch X 3/4-Inch Meter

First	2,000 Gallons	\$16.92 Minimum Bill
Next	3,000 Gallons	4.23 Per 1,000 Gallons
Next	5,000 Gallons	3.25 Per 1,000 Gallons
Over	10,000 Gallons	2.75 Per 1,000 Gallons

2-Inch Meter

First	20,000 Gallons	\$73.36 Minimum Bill
Over	20,000 Gallons	2.75 Per 1,000 Gallons

ATTACHMENT B  
STAFF REPORT, CASE NO. 2012-00517  
STAFF'S RECOMMENDED RATES

Monthly Sewer Rates

Residential Service

\$37.91 Per Month

ATTACHMENT C  
 STAFF REPORT, CASE NO. 2012-00517  
 SYMSONIA WATER DISTRICT  
 ENGINEERING DIVISION'S  
 RECOMMENDED AVERAGE SERVICE LIVES

Historically, the Commission has relied on the National Association of Regulatory Utility Commissioners Study of Depreciation Practices for Small Water Utilities ("NARUC Study"), dated August 15, 1979, and the O&M Guide for the Support of Rural Water-Wastewater Systems by Commission on Rural Water, Chicago, Illinois, 1974 ("O&M Guide"), 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 waterworks practices. Typically, an adjustment is made when the Commission finds that a utility is proposing to use a service life that falls outside of this range, while service lives falling within these ranges are generally accepted.

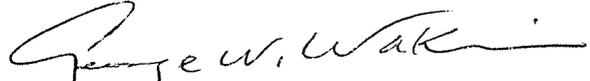
In the following table, Engineering staff has identified the account classifications for which the utility's current service lives are not consistent with the service lives contained in the NARUC Study and the O&M Guide. The table shows the utility's current and Engineering staff's recommendation for the estimated service lives based on a review of information contained in the record of this case.

<b>Water Asset Classification</b>	<b>Current</b>	<b>Staff's Recommendation</b>	<b>NARUC Study</b>
Wells and springs	39	35	25-35
Supply mains	39	62.5	50-75
Transmission and distribution main	39	62.5	50-75
Hydrants	10	50	40-60
Office furniture & equipment	5	20	20-25

<b>Sewer Asset Classification</b>	<b>Current</b>	<b>Staff's Recommendation</b>	<b>O&amp;M Guide</b>
Pumping equipment	32.5	7	7
Oxidation lagoon	32.5	25	5-25
Treatment and disposal	39	10	10
Office equipment	5	20	20-25
Office furniture	7	20	20-25
Office improvements	15	35	35-40
Trencher	7	15	10-15
Store equipment	10	20	20
Transportation equipment	10	7	7

The utility appears to be utilizing service lives outside the range recommended by NARUC and the O&M Guide. Absent any specific and verifiable evidence supporting alternative service lives, Engineering staff recommends using the service lives identified above, which are within the range found reasonable in the NARUC Study and the O&M Guide.

Prepared March 1, 2013:



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