

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC ALTERNATIVE RATE	)	CASE NO.
ADJUSTMENT FILING OF FARMDALE	)	2020-00021
WATER DISTRICT	)	

NOTICE OF FILING OF STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of February 10, 2020, 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. Due to COVID-19, Commission Staff is unable to physically sign this report. When Commission staff is able to safely sign this report, a notice of filing with the executed signature page will be made in this case docket. Pursuant to the Commission's February 10, 2020 Order, Farmdale Water District is required to file comments regarding the findings of Staff no later than 14 days from the date of entry of this Staff Report. Pursuant to the Commission's Orders in Case No. 2020-00085,<sup>1</sup> issued March 16, 2020, and March 24, 2020, Farmdale Water District SHALL NOT FILE the original paper copy at this time, but rather shall file original paper copy within 30 days of the lifting of the current state of emergency.

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<sup>1</sup> Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC Mar. 16, 2020), Order at 5–6. Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC Mar. 24, 2020), Order at 1–3.



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Kent A. Chandler  
Executive Director  
Public Service Commission  
P.O. Box 615  
Frankfort, KY 40602

DATED APR 27 2020

cc: Parties of Record

Staff Report  
Case No. 2020-00021

STAFF REPORT  
ON  
FARMDALE WATER DISTRICT  
CASE NO. 2020-00021

Farmdale Water District (Farmdale District), a water district organized pursuant to KRS Chapter 74, provides water service to approximately 2,655 residential and commercial customers located in Anderson, Franklin, and Shelby counties, Kentucky.<sup>1</sup> On January 22, 2020, Farmdale District submitted an application (Application) requesting to adjust its monthly water service rates pursuant to the procedures set forth in 807 KAR 5:076. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated February 10, 2020.

To comply with the requirements of 807 KAR 5:076, Section 9,<sup>2</sup> Farmdale District based its requested rates on a historic test period that coincides with the reporting period shown in its most recent Annual Report on file with the Commission; the calendar year ended December 31, 2018.

Using the operating ratio method<sup>3</sup> and its pro forma test-year operations, Farmdale District determined that it could justify a revenue increase of \$153,145, or 13.50 percent,

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<sup>1</sup> *Annual Report of Farmdale County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2018* (2018 Annual Report) at pp. 12 and 49.

<sup>2</sup> “The reasonableness of the proposed rates shall be determined using a 12-month historical test period, adjusted for known and measureable changes, that coincides with the reporting period of the applicant’s annual report for the immediate past year.”

<sup>3</sup> Operating Ratio is defined as the ratio of expenses, including depreciation and taxes, to gross revenues. It is illustrated by the following equation:

$$\text{Operating Ratio} = \frac{\text{Operating Expenses} + \text{Depreciation} + \text{Taxes}}{\text{Gross Revenues}}$$

as shown in the table below.<sup>4</sup> The rates requested by Farmdale District would increase the monthly bill of a typical residential customer using 4,000 gallons per month by \$3.80, from \$30.40 to \$34.20, or approximately 12.50 percent.<sup>5</sup>

Pro Forma Operating Expenses	\$ 1,234,931
Divide by: Operating Ratio	<u>88%</u>
Subtotal	1,403,331
Add: Average Annual Interest Expense	<u>51,991</u>
Total Revenue Requirement	1,455,322
Less: Interest Income	(5,371)
Other Operating Revenue	(115,035)
Nonutility Income	(47,389)
Net Income/(Loss) from Contract Work	<u>                    </u>
Revenue Required from Rates	1,287,527
Less: Normalized Revenues from Water Sales	<u>(1,134,382)</u>
Required Revenue Increase/(Decrease)	<u>\$ 153,145</u>
Percentage Increase	<u>13.50%</u>

To determine the reasonableness of the rates requested by Farmdale District, Commission Staff (Staff) performed a limited financial review of Farmdale District’s test-year operations. The scope of Staff’s review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable changes to test-year operations were identified, and adjustments were made when their effects were deemed material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

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<sup>4</sup> Application, Attachment 4, Pro Forma Income Statement and Revenue Requirement Calculation.

<sup>5</sup> *Id.*, Attachment 1, Customer Notice.

Staff's findings are summarized in this report. Mark Frost and Anthony Wooldridge reviewed the calculation of Farmdale District's Overall Revenue Requirement. Eddie Beavers reviewed Farmdale District's reported revenues, Cost-of-Service Study (COSS), and rate design.

### SUMMARY OF FINDINGS

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Operating Ratio Method, as generally accepted by the Commission, Staff found Farmdale District's Overall Revenue Requirement to be \$1,309,681. A revenue increase of \$175,299, or 15.45 percent, is necessary to generate the Overall Revenue Requirement Staff determined that Farmdale District could justify. If Farmdale District wishes to request that the Commission approve a revenue increase of the amount calculated by Staff, it should do so in its written response to this report.

2. Water Rates. Farmdale District proposed to revise its rate design through the preparation of a COSS performed by Alan Vilines, a consultant of Kentucky Rural Water Association. This revised rate design establishes a revised declining usage block rates. During the field review Farmdale District's Staff informed Staff that the district had not requested this change in rate design when retaining Mr. Vilines and, as proposed in the application, and preferred to maintain the current rate design in its tariff. Staff acknowledges the desires of Farmdale District's Staff; however, Staff reviewed the proposed rate design and recommends the Commission approve the change in rate design.

The Commission directed Staff to prepare a COSS and calculate rates for Farmdale District based upon Staff's findings in this study. Staff performed the study

following the guidelines and procedures recommended by the American Water Works Association (AWWA) in its Water Rates Manual M-1. The Commission has long recognized the AWWA guidelines as a reasonable method for ratemaking. The rates set forth in Appendix B to this report are based upon Staff's COSS and will produce Staff determined revenues sufficient to recover the revenue requirement of \$1,309,680 from water sales.

Staff's COSS, attached to this report as Appendix A, analyzed the utility's expenses and allocated these expenses according to three classifications: Commodity, Demand, and Customer. The Commodity costs are those directly associated with the cost of water. Demand Costs are those associated with providing the facilities to meet the peak demands placed on the system. Customer costs are those incurred to serve customers regardless of the volume of water used.

The Allocation of Expenses sheet of Staff's COSS shows the allocation of Operation and Maintenance expenses to the functional cost components. Staff utilized information obtained through the utility's application, the 2018 Annual Report, and field reviews to allocate these costs. Administrative and general expenses are allocated to the cost components based on the subtotal allocated percentages. The rates calculated by Staff increase the monthly bill of a typical residential customer using 4,000 gallons per month by \$3.97, from \$30.40 to \$34.37, or approximately 13.06 percent.<sup>6</sup>

#### PRO FORMA OPERATING STATEMENT

Farmdale District's Pro Forma Operating Statement for the test year ended December 31, 2018, as determined by Staff, appears below.

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<sup>6</sup> *Id.*, Attachment 1, Customer Notice.

	Test Year Operations	Pro Forma Adjustments	Adj. Ref.	Pro Forma Operations
Operating Revenues:				
Revenue - Metered Water Sales	\$ 1,105,000	\$ 29,382	(A)	\$ 1,134,382
Other Operating Revenues:				
Forfeited Discounts	38,550			38,550
Misc. Service Revenues	76,485	(69,184)	(B)	
		1,345	(C)	
		6,213	(D)	8,646
Total Other Operating Revenues	115,035	(61,626)		47,196
Total Operating Revenues	1,220,035	(32,244)		1,181,578
Operating Expenses:				
Operation & Maintenance:				
Salaries & Wages - Employees	165,522	(38,821)	(B)	
		67,987	(E)	
		(1,617)	(F)	193,071
Salaries & Wages - Commissioners	14,600	(2,427)	(B)	12,173
Employee Benefits	208,718	(10,620)	(B)	
		(23,761)	(G)	
		(101,444)	(H)	72,893
Purchased Water	601,186	11,334	(I)	
		(92,915)	(J)	519,605
Purchased Power	20,353	(3,087)	(J)	17,266
Materials & Supplies	74,232	(3,845)	(F)	70,387
Contractual Services - Other	31,630			31,630
Transportation	11,044	(68)	(B)	
		(3,300)	(F)	7,676
Insurance - Vehicle	4,998			4,998
Insurance - General Liability	11,663			11,663
Insurance - Workers Comp.	4,266			4,266
Bad Debt	3,501			3,501
Miscellaneous	51,198	(12,017)	(B)	39,181
Total Operation & Maintenance	1,202,911	(214,601)		988,310
Depreciation	146,294	(9,289)	(B)	
		13,163	(K)	150,168
Taxes Other Than Income	55,180	(2,970)	(B)	
		(38,050)	(L)	
		415	(M)	14,574
Utility Operating Expenses	1,404,385	(251,333)		1,153,052
Net Utility Operating Income	(184,350)	219,089		28,526
Other Income & Deductions:				
Revenues from Contract Work		69,898	(B)	69,898
Costs and Expenses from Contract Work		(76,212)	(B)	(76,212)
Net Income/(Loss) from Contract Work		(6,314)		(6,314)
Interest Income	5,371			5,371
Nonutility Income	47,389	(586,271)	(B)	
		540,257	(B)	
		(1,345)	(D)	30
Total Other Income and Deductions	52,760	(53,673)		(913)
Net Income Available for Debt Service	\$ (131,590)	\$ 165,416		\$ 27,613

(A) Billing Analysis Adjustment. Farmdale reported in its 2018 Annual Report water sales revenue of \$1,105,000. Staff adjusted this revenue by \$29,382 to reflect the \$1,134,382 water sales revenue calculated in the billing analysis provided in the Application.

Farmdale District provided within their billing analysis an analysis of a 5/8-inch x 3/4-inch meter with one trailer, a 5/8-inch x 3/4-inch meter with two trailers, and a 1-inch meter with one trailer; however, these rates are not in the tariff filed with the Commission. The tariff on file with the Commission only states a policy for trailers that are connected to a metered service on the customer's side of the meter. The practice of allowing multiple users on one meter was once very prevalent for small water districts. This practice has slowly been replaced with a one-customer per one-meter policy, but multiple users connected to one meter can still be found within some districts. Staff reviewed the filed billing analysis for these customers and inputted this information into the development of rates.<sup>7</sup> Staff has provided additional tariff language in Appendix D to be included in Farmdale District's current tariff filed with the Commission. Staff would recommend the Commission approve this language and recommends that Farmdale District move to end the practice of multiple users connected to one meter as soon as feasible to more equitably serve the customers and the district.

(B) Non-Regulated Contracted Operations. Farmdale District provides contracted billing and collection services to the Frankfort Sewer Department (Frankfort) and to the Franklin County Sanitation District (Franklin Sanitation). Pursuant to these contracts, Farmdale District bills and collects the base sewer rates that are in effect for

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<sup>7</sup> See Appendix C for the billing analysis.

each sewer utility. For Frankfort, Farmdale District remits 85 percent of the amounts collected while retaining 15 percent of the collections as its contracted fee. Per its contract with Franklin Sanitation, Farmdale District receives a flat fee of \$3 per month for each Franklin Sanitation sewer customer billed.

During the test year, Farmdale District reported revenues and expenses from its contracted billing and collection services using the accounts shown below.

<u>Account No. and Title</u>	<u>Descriptions</u>	<u>Amounts</u>
471 - Miscellaneous Service Revenues	Sewer Collection Fees	\$ 69,184
421 - Nonutility Income	Amounts Billed for Sewer Service	586,271
421 - Nonutility Income	Remitted Sewer Revenues	<u>(540,257)</u>
Increase to Net Income		<u>\$ 115,198</u>

Farmdale District proposes to move the revenue from its sewer collection fees from Account No. 471, Miscellaneous Service Revenues (Account 471) to Account No. 474, Other Water Revenue, leaving a balance of \$7,301 in the Account 471. The only explanation given by Farmdale District for its adjustment is that it provides more detail.

The adjustment to Account 471 as proposed by Farmdale District is incorrect. Farmdale District's contracted services are not regulated by the Commission, the Uniform Systems of Accounts (USoA) requires that all revenues derived from any non-regulated activity be reported "below-the-line" using Account 415, Revenues from Merchandising, Jobbing and Contract Work (Account 415).<sup>8</sup> The USoA further requires that all expenses attributed to non-regulated services be recorded in Account 416, Costs and Expense of Merchandising and Contract Work (Account 416).<sup>9</sup>

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

<sup>9</sup> *Id.*

Farmdale District recorded a credit to Account 421, Nonutility Income (Account 421) of \$586,271, the collections it made on behalf of Franklin Sanitation and Frankfort. In addition, Farmdale District recorded a debit of \$540,257 to Account 421, the amount of the sewer collections that it remitted to the sewer utilities. A prerequisite for revenue recognition by any entity, regulated or unregulated, is that revenue must be earned by the reporting entity prior to its recognition.<sup>10</sup> The collections made by Farmdale District on behalf of the sewer utilities were earned by those utilities through the provision of sewer services and they are the only ones that would report the revenues from those collections.

Neither the collections nor the remittances would be reportable by Farmdale District on its Income Statement. When Farmdale District initially bills the sewer customers, the billed amounts would be recorded as a liability on Farmdale District's Balance Sheet. When Farmdale District collects and remits the sewer fees to the sewer utilities, Farmdale District would record the amounts remitted as a debit to reduce the accrued liability. To follow the requirements of the USoA, Staff is decreasing test-year Account 471 by \$69,184, increasing Account 421 by \$540,257 and is decreasing Account 421 by \$586,271.

As previously mentioned, Farmdale District reported test-year revenues from its non-regulated, contract services of \$69,184. Beginning in August 2018, Farmdale District began providing billing services to the Hi'point subdivision on behalf of Franklin Sanitation. During the five months from August 2018 to December 2018, Farmdale District mailed 169 bills to the Hi'point customers. Annualizing the number of actual bills

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<sup>10</sup> See Financial Accounting Standards Board, Accounting Standards Codification 605-10-25-1.

mailed in 2018 results in an additional 238 bills<sup>11</sup> to the Hi'point customers and an increase to the revenues from non-regulated, contract services of \$714.<sup>12</sup> Staff is increasing Farmdale District's non-regulated, contract services of \$69,184 by \$714 to a pro forma level of \$69,898

Although KRS 278.2215 exempts Farmdale District from the requirements of KRS 278.2203, use of the fully distributed cost method is necessary to accurately account for Farmdale District's nonregulated activities and assess its profitability. In Case No. 2013-00485,<sup>13</sup> Staff employed the "fully distributed cost method" to identify the operating expenses (customer account, administrative, and meter reading) that it allocated to Farmdale District's non-regulated contract billing services.

Through application of the "fully distributed cost method" in the instant case, Staff identified direct and indirect costs related to Farmdale District's non-regulated operations of \$76,212 that should be reclassified "below-the-line" to Account 416. The non-regulated expenses Staff proposes to reclassify are calculated and discussed in full detail in Appendix E of this report. Staff's accounting for Farmdale District's non-regulated, contracted billing and collection services using accounts Account 415 and Account 416 produce a "below-the-line" net loss of \$(6,314).<sup>14</sup> To eliminate the cross-subsidization of

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<sup>11</sup> 169 (Actual Hi'point Bills) ÷ 5 (Months) = 34 (Average Monthly Bills) x 7 (months) = 238.

<sup>12</sup> 238 (Additional Test-Year Bills) x \$3 (Billing and Collection Fee) = \$714.

<sup>13</sup> Case 2013-00485, *Alternative Rate Filing of Farmdale Water District* (Ky. PSC July 23, 2014).

<sup>14</sup> Revenues from Merchandising, Jobbing and Contract Work	\$ 69,898
Costs and Expenses from Merchandising, Jobbing and Contract Work	<u>- 76,212</u>
"Below-the-Line" Net Loss	<u>\$ (6,314)</u>

Farmdale District's non-regulated contract billing services, Staff is excluding the \$(6,314) net loss from its revenue requirement calculation.<sup>15</sup>

(C) Misclassified Revenues. In reviewing Farmdale District's test-year general ledger, Staff discovered that Farmdale District misclassified its returned check revenues of \$1,345 to Account 421. Since the returned check fee is for a regulated service, the revenues derived from that charge should be recorded "above the line" in Account 471. To correct Farmdale District's misclassification error Staff is increasing Account 471 by \$1,345 and decreasing Account 421 by that same amount.

(D) Nonrecurring Charges. Farmdale District submitted a tariff filing on February 14, 2020, increasing several of its existing nonrecurring fees and establishing new fees. Because there is no history to illustrate the impact the imposition of the new fees will have on revenues, an adjustment to reflect those fees would fail to meet the ratemaking criteria of being known and measurable.

In its tariff, filing Farmdale District increased the following test-year non-recurring fees: the disconnection/reconnection fee increased from \$60 to \$100, and the returned check fee from \$10 to \$20, percent increases of 66.67 and 100.00, respectively. An adjustment to reflect the increased test-year non-recurring fees would meet the ratemaking known and measurable criteria. As shown below, Staff determined that increases to the disconnect/reconnect and returned check fees will result in additional annual revenues of \$6,213. Accordingly, Staff is increasing the test-year Miscellaneous Service Revenue by this amount.

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<sup>15</sup> Accounts 415 and 416 are included in Staff's Pro Forma Income statement, but they are excluded from the revenue requirement calculation to eliminate the cross-subsidization of the nonregulated activity by the regulated water ratepayers.

Test-Year Revenue from Returned Check Charges	\$ 1,345	
Multiplied by: Percentage Increase	100.00%	
Increase		\$ 1,345
Test-Year Revenue from Disconnect/Reconnect Charges	\$ 7,301	
Multiplied by: Percentage Increase	66.67%	
Increase		4,868
Increase in Nonrecurring Charges		<u>\$ 6,213</u>

(E) Employee Salaries and Wages. Farmdale District proposes to increase its reported test-year employee salaries and wages expense of \$165,522 by \$33,280.<sup>16</sup> Farmdale District explains that in 2019 it hired a new full-time employee and a new part-time employee, which is the basis for its proposed adjustment.<sup>17</sup>

In reviewing Farmdale District's 2019 payroll records, Staff found that Farmdale District did experience a change in its staffing due to retirements, resignations, and promotions. Using Farmdale District's current staff level of six full-time employees and the 2019 employee wage rates, Staff calculates a pro forma employee Salaries and Wages expense of \$233,509, which is \$67,987, above the reported expense level. Staff's calculation is in the table below.

	Hours Worked		Hourly Wage Rates		Pro Forma Salaries & Wages		
	Regular	Overtime	Reg	Ovt	Regular	Overtime	Total
Manager	2,080.0	63.0	\$ 20.00	\$ 30.00	\$ 41,600	\$ 1,890	\$ 43,490
Field Worker/Meter Reader	2,080.0	160.0	\$ 14.00	\$ 21.00	29,120	3,360	32,480
Field Worker	2,080.0	0.0	\$ 20.50	\$ 30.75	42,640	0	42,640
Office Clerk	2,080.0	0.0	\$ 16.65	\$ 24.98	34,632	0	34,632
Office Manager	2,080.0	0.0	\$ 25.59	\$ 38.39	53,227	0	53,227
Office Clerk	2,080.0	0.0	\$ 13.00	\$ 19.50	27,040	0	27,040
Pro Forma Salaries and Wages - Employees							233,509
Less: Reported Salaries and Wages - Employees							<u>(165,522)</u>
Payroll Adjustment							<u>\$ 67,987</u>

<sup>16</sup> Application, Attachment 4, Schedule of Adjusted Operations.

<sup>17</sup> *Id.*, Attachment 4a, Reference D.

(F) Capitalization of Test-Year Meter Installations. During the test year, Farmdale District installed eleven new 5/8-inch x 3/4-inch meter connections to its distribution system and collected \$12,452 in tap-on fees. Farmdale District recorded the tap-on fees of \$12,452 in Account No 432, Proceeds from Capital Contributions and recorded the \$3,690 cost of its new meters in Account No. 334, Meters and Meter Installations.

Farmdale District explains that it reported the labor and material cost of the meter installations as an operating expense at the time the meters were installed.<sup>18</sup> Substituting the tap-on fees for the actual costs it incurred to install the meters, Farmdale proposes to deduct thirty percent of the collected tap-on fees or \$3,736 from Salaries and Wages expense and the remaining 70 percent or \$8,716 from the Materials and Supplies expense.<sup>19</sup> Farmdale proposes to include depreciation of the estimated meter cost in its Depreciation expense adjustment.<sup>20</sup>

Staff notes that although Farmdale District's adjustment does recognize that the meter tap-on fee includes both labor and material costs, it fails to acknowledge that its tap-on fee also includes transportation costs. Further, Farmdale District failed to reduce its adjustment to Materials and Supplies expense by \$3,690, the cost of the new meters that it had already recorded in Utility Plant In Service (UPIS) and depreciated.

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<sup>18</sup> Application, Attachment 4a, Reference C.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

According to the adjusted cost justification calculations supporting the tap-on fee authorized in Case No. 2013-00485,<sup>21</sup> 60.51 percent of the tap-on fee is for materials and supplies, 12.99 percent is for wages, and the remaining 26.50 percent is for transportation and equipment costs. Using the above percentages, the test-year tap-on fees of \$12,452 and the capitalized meter cost, Staff is reducing material and supplies by \$3,845, salaries and wages by \$1,617, and transportation by \$3,300 as shown below.

	Tap-on Fee		Tap-on	Less: Cap.	Staff
	\$	%	Allocation	Meters	Adjustments
Materials and Supplies	\$ 685	60.51%	\$ 12,452	\$ 3,690	\$ (3,845)
Wages	147	12.99%	7,535		(1,617)
Transportatin And Equipment	300	26.50%	3,300		(3,300)
Totals	\$ 1,132	100.00%	\$ 12,452	\$ 3,690	\$ (8,762)

(G) Employee Insurance Benefits. Farmdale District reported paying test-year employee insurance premiums of \$44,344. Farmdale District currently pays 100 percent of the monthly health and life insurance premiums for its eligible full-time employees.<sup>22</sup> The Commission is placing greater emphasis on evaluating employees' total compensation packages, including both salary and benefit programs, for market and geographic competitiveness to ensure the development of a fair, just, and reasonable rate. In most cases, the Commission has found that health care that is 100 percent funded by the employer does not meet those criteria.

Staff is reducing Farmdale District's pro forma Employee Pension and Benefit expense by \$23,761 as calculated in the table below. Staff's adjustment reflects the

<sup>21</sup> Case No. 213-00485, Application, Average Meter Connection Expense Cost Justification, 5/8-inch x 3/4-Inch Meter; the June 30, 2014 Staff Report, pages 5 and 18; and the July 13, 2014 Order, page 1.

<sup>22</sup> Due to age restrictions, health insurance coverage is not available for the Office Manager and the existing full-time office clerk. Farmdale District promoted its part-time office clerk to full-time status in 2020 but there is a time restriction before insurance benefits are available.

current employee health and life insurance premiums, and a 21 percent employee contribution rate for health insurance coverage.<sup>23</sup>

Job Title	Employee Health Insurance				Totals
	Total Premium	Emp. Cont -21%	Employer Contribution	Life Insurance	
Manager	\$ 6,225	\$ (1,307)	\$ 4,918	\$ 95	\$ 5,013
Field Worker/Meter Reader	6,385	(1,341)	5,044	95	5,139
Field Worker	13,005	(2,731)	10,274	0	10,274
Office Clerk	0	0	0	95	95
Office Manager	0	0	0	62	62
Office Clerk	0	0	0	0	0
Pro Forma Employee Insurance Benefits					20,583
Less: Test-Year Employee Insurance Benefits					(44,344)
Employee Insurance Benefit Adjustment					<u>\$ (23,761)</u>

In the test year, Farmdale District provided its Chairman with a Medicare Part D plan whose premium was \$100 per month or \$1,200 annually. In Case No. 2003-00224,<sup>24</sup> the Commission found that the members of a board of commissioners should be treated as part-time employees because they generally attend only one board meeting per month and are not required to work 40 hours per week. The Commission denied rate recovery of the costs associated with insurance benefits provided to members of the district's board of commissioners because those benefits were not provided to other part-time employees.<sup>25</sup>

Pursuant to its employment policies, Farmdale District provides insurance benefits only to full-time employees. As the Commission considers each member of Farmdale District's Board of Commissioners as a part-time employee, Staff is not including the

<sup>23</sup> <https://www.bls.gov/ncs/ebs/benefits/2019/ownership/private/table10a.pdf>

<sup>24</sup> Case No. 2003-00224, *Application of Northern Kentucky Water District for (A) and Adjustment of Rates; (B) a Certificate of Public Convenience and Necessary for Improvements to Water Facilities if Necessary; and (C) Issuance of Bonds* (Ky. PSC June 14, 2004) at 11.

<sup>25</sup> *Id.*, at 11–12.

Chairman's Medicare Part D premium in its pro forma Employee Pension and Benefit expense.<sup>26</sup>

(H) County Employee Retirement System (CERS). Farmdale District reported a test-year employee pension expense of \$164,374. Farmdale District provides pension benefits and post-retirement health care benefits to its employees by participating in the CERS. As a participating member, Farmdale District is required to contribute a percentage of its employee wages to CERS. The CERS pension expense Farmdale District reported in the test year conformed to the requirements of the General Accounting Standards Board Pronouncement No. 68 (GASB 68).

According to Farmdale District, the reporting requirements of GASB 68 resulted in reported test-year pension expense being \$139,109 greater than the actual amount that it paid to CERS.<sup>27</sup> However, after including the proposed increase to employee salaries and the increase to the CERS employer contribution rate, Farmdale District estimated that its test-year payments to the CERS program would increase by \$24,486.<sup>28</sup> Farmdale District proposes a net reduction to Employee Pension and Benefit expense of \$114,623.<sup>29</sup>

In Case No. 2016-00163,<sup>30</sup> the Commission discussed in great detail the reporting requirements of GASB 68, and how those requirements would impact a utility's income

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<sup>26</sup> Because Staff did not include the \$1,200 premium for the Chairman's coverage in its calculation of pro forma employee insurance benefits expense it is not included in its pro forma operating expenses.

<sup>27</sup> Application, Attachment 4a, Reference E.

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> Case No. 2016-00163, *Alternative Rate Adjustment filing of Marion County Water District (Ky. PSC Nov. 10, 2016)*.

statement and balance sheet. In that proceeding, the Commission found the annual pension expense should be equal to the amount of a district's contributions to CERS, which historically have been "fairly constant." In the fiscal year, beginning July 1, 2020, the CERS employer contribution rate increased to 26.95 percent.<sup>31</sup> Based on the above, Staff determined that Farmdale District's pro forma CERS employer contributions are \$62,930,<sup>32</sup> resulting in a decrease to Employee Pensions and Benefits expense of \$101,444.<sup>33</sup>

(l) Changes to Wholesale Purchased Water Rate. Farmdale District reported a test-year Purchased Water expense of \$601,186. According to Farmdale District its wholesale water supplier, the Frankfort Plant Board, increased its wholesale water rate in calendar year 2018 to reflect an increase in Kentucky River Authority's withdrawal fee.<sup>34</sup> To recognize a full year of purchases at the higher rate, Farmdale District proposes to increase its test-year Purchased Water expense by \$11,334.<sup>35</sup> Upon its review of the proposed adjustment, Staff finds that it is correct and that it meets the ratemaking criteria of being known and measurable. Accordingly, Staff is increasing test-year purchased water expense by \$11,334.

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<sup>31</sup> <https://kyret.ky.gov/Employers/Pages/Contribution-Rates.aspx>

<sup>32</sup> \$233,509 (Pro Forma Full-Time Water Salaries) x 26.95% (July 1, 2020 CERS Employer Contribution Rate) = \$62,930.

<sup>33</sup> \$62,930 (Pro Forma CERS Contribution) - \$164,374 (Test-Year CERS Contribution) = \$101,444.

<sup>34</sup> Application, Attachment 4a, Reference F.

<sup>35</sup> *Id.*

(J) Excess Water Loss. Commission regulation 807 KAR 5:066, Section 6(3),<sup>36</sup> limits water loss to 15 percent for ratemaking purposes unless the Commission finds an alternative level reasonable. Farmdale District reported a test-year water loss of 30.17 percent, or 15.17 percentage points above the 15 percent allowable limit.<sup>37</sup> To eliminate the cost of water purchased and pumped water over the 15 percent allowable limit, Farmdale District proposes to decrease Purchased Water expense and Purchased Power expense by \$92,915 and \$3,087 respectively.<sup>38</sup> Staff finds that Farmdale District's proposal to eliminate the costs associated with excessive water loss conforms to the Commission's current practice and, therefore, is reducing Purchased Water expense and Purchased Power expense by those amounts. Farmdale District is currently under the Commission's Order of November 22, 2019, in Case No. 2019-00041 to implement changes to reduce excessive water loss.<sup>39</sup>

(K) Depreciation. In its Application, Farmdale District proposes to increase its test-year depreciation expense of \$146,294 by \$6,463.<sup>40</sup> Farmdale District explains that the Commission typically requires a water utility to adjust depreciation expense when its

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<sup>36</sup> Unaccounted-for water loss. Except for purchased water rate adjustments for water districts and water associations, and rate adjustments pursuant to KRS 278.023(4), for ratemaking purposes a utility's unaccounted-for water loss shall not exceed fifteen (15) percent of total water produced and purchased, excluding water used by a utility in its own operations. Upon application by a utility in a rate case filing or by separate filing, or upon motion by the commission, an alternative level of reasonable unaccounted-for water loss may be established by the commission. A utility proposing an alternative level shall have the burden of demonstrating that the alternative level is more reasonable than the level prescribed in this section.

<sup>37</sup> 2018 Annual Report at 57.

<sup>38</sup> Application, Attachment 4a, Reference G.

<sup>39</sup> See Case No. 2019-00041, *Electronic Investigation into Excessive Water Loss by Kentucky's Jurisdictional Water Utilities* (Ky. PSC Nov. 22, 2019).

<sup>40</sup> *Id.*, Attachment 4.

depreciation lives fall outside of the ranges recommended by the National Association of Regulatory Utility Commissions (NARUC) in its report published in 1979 titled Depreciation Practices for Small Water Utilities (NARUC Study).<sup>41</sup> According to Farmdale District, its adjustment brings the depreciable lives of its assets to or near the midpoint of NARUC's recommended ranges.<sup>42</sup> Farmdale District claims its adjustment for the Automatic Meter Reading (AMR) meters deviates from the NARUC range to recognize the specific life of those meters instead of a broad category.<sup>43</sup>

In reviewing the reasonableness of the depreciation lives used by water utilities, the Commission has historically relied upon the NARUC Study. When no evidence exists to support a specific life that is inside or outside the NARUC Study ranges, the Commission has historically used the midpoint of the NARUC Study ranges to depreciate a utility plant.

Upon its review of Farmdale District's depreciation schedule, Staff determined that Farmdale District's depreciation lives are at the midpoint of the NARUC Study range for each asset category with the exception of the Automated Meter Reading (AMR) system. In Case No. 2013-00485, Farmdale District provided the following information that it had received from its AMR manufacturer:

The manufacturer warrants the meter to perform accurately for 20 years from shipment date with conditions that limit the manufacturer's obligation only to repair or replace nonperforming batteries, system flowtube, the flow sensing and data processing assemblies, and the register with hourly reads at no cost for the first ten years. After at a prorated

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<sup>41</sup> *Id.*, Attachment 4a, Reference H.

<sup>42</sup> *Id.*

<sup>43</sup> *Id.*

percentage of the replacement price (of listed elements above) which reaches 100 percent at 20 or more years of service.<sup>44</sup>

Staff determined that this information indicated that the useful life range for the AMR system is 10–20 years of which the midpoint of 15 years is reasonable and appropriate.<sup>45</sup>

Adjusting Farmdale District’s depreciation expense to reflect a full-year of depreciation for the assets placed in service in 2018, removing the depreciation for the assets fully depreciated in 2018, and using a depreciation life of 15 years for the AMR system, Staff is increasing depreciation expense by \$13,163 as shown in the table below.

Account Category Titles	NARUC Depreciation Lives			Depreciation Expense		
	Floor	Ceiling	Mid-Point	Staff	Farmdale District	Adjustment
Transportation Equipment	7.0	7.0	7.00	\$ 3,287	\$ 4,601	\$ (1,314)
Structures & Improvements	35.0	40.0	37.50	697	1,126	(429)
Distribution Reservoirs	30.0	60.00	45.00	28,976	28,764	212
Fire Hydrants	40.0	60.00	50.00	253	265	(12)
Maint Equipment	15.0	20.0	17.5	312	1,481	(1,169)
Meters & Installations	30.0	50.0	40.00	3,885	3,605	280
Meters - AMR	10.0	20.00	15.00	65,545	24,581	40,964
Meters	35.0	45.0	40.00	1,762	2,456	(694)
Office Furniture & Equipment	20.0	25.0	22.5	337	15,547	(15,210)
Pumping Equipment	20.0	20.0	20.0	1,574	899	675
Trans & Distribution Mains	50.0	75.00	62.50	52,829	62,969	(10,140)
Totals				<u>\$ 159,457</u>	<u>\$ 146,294</u>	<u>\$ 13,163</u>

(L) Sales and School Taxes. Farmdale District collects and remits school taxes from its customers on behalf of the Franklin County Board of Education. It also collects sales taxes on commercial accounts that Farmdale District remits to the Commonwealth of Kentucky. Farmdale District improperly reported test-year tax collections of \$38,050 in Taxes Other than Income Tax expense. Because Farmdale District is acting as a collecting agent for the taxing authorities, the taxes it collects is neither revenue nor

<sup>44</sup> Case No. 2013-00458, Staff Report issued June 30, 2014, Attachment B, Engineering Division's Analysis of Asset Service Lives, page 2.

<sup>45</sup> *Id.*

reportable as an operating expense. Accordingly, Staff reduced Taxes Other than Income Tax expense by \$38,050.

(M) Payroll Tax. Farmdale District reported a test-year payroll tax expense of \$14,355. Using the pro forma employee salaries and wages expense and the current FICA rate of 7.65 percent, Staff calculated a pro forma FICA expense of \$14,770. Accordingly, Staff is increasing the payroll tax expense by \$415.<sup>46</sup>

### REVENUE REQUIREMENT

The Commission has historically used the Debt Service Coverage (DSC) methodology to calculate the revenue requirement for water districts and water associations because an outstanding bond ordinance or loan agreement requires the water district or association to maintain a predetermined DSC level. In this instance, the DSC methodology fails to produce a revenue requirement sufficient to support Farmdale District's financial operations and to provide the necessary funds to allow Farmdale District to address its excessive water loss. Therefore, Staff is accepting Farmdale District's proposal to use the operating ratio method to calculate its revenue requirement.

Using the operating ratio method, Staff determined that Farmdale District requires an Overall Revenue Requirement of \$1,362,278. As shown below, a revenue increase of \$175,299 or 15.45 percent is required.

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<sup>46</sup> \$193,070 (Pro Forma Employee Salaries and Wages Exp.) x 7.65% (FICA Rate) = \$14,770 - \$14,355 (Recorded Payroll Tax) = \$415.

	<u>Farmdale District</u>	<u>Staff</u>
Pro Forma Operating Expenses	\$ 1,234,931	\$ 1,153,052
Divide by: Operating Ratio	<u>88%</u>	<u>88%</u>
Subtotal	1,403,331	1,310,287
Add: Average Annual Interest Expense	<u>51,991</u>	<u>51,991</u>
Total Revenue Requirement	1,455,322	1,362,278
Less: Interest Income	(5,371)	(5,371)
Other Operating Revenue	(115,035)	(47,196)
Nonutility Income	(47,389)	(30)
Net Income/(Loss) from Contract Work	<u>                    </u>	<u>                    </u>
Revenue Required from Rates	1,287,527	1,309,681
Less: Normalized Revenues from Water Sales	<u>(1,134,382)</u>	<u>(1,134,382)</u>
Required Revenue Increase/(Decrease)	<u>\$ 153,145</u>	<u>\$ 175,299</u>
Percentage Increase	<u>13.50%</u>	<u>15.45%</u>

Signatures:

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Prepared by: Mark Frost  
Revenue Requirements Branch  
Division of Financial Analysis

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Prepared by: Anthony Wooldridge  
Revenue Requirements Branch  
Division of Financial Analysis

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

APPENDIX A

APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2020-00021 DATED APR 27 2020

Cost-of-Service Study

Allocation of Plant Value				
	<b>Total</b>	<b>Commodity</b>	<b>Demand</b>	<b>Customer</b>
Land & Land Rights	4,806		4,806	
Structures & Improvements	50,626		50,626	
Pumping Equipment	64,709		64,709	
Dist Reservoirs & Standpipes	1,333,372		1,333,372	
Trasmission & Distribution Mains	3,053,992		3,053,992	
Meters & Meter Installation	1,555,006			1,555,006
Hydrants	36,075			36,075
<b>Subtotal</b>	<b>\$6,098,586</b>		<b>\$4,507,505</b>	<b>\$1,591,081</b>
Allocation Percentages	100%		73.9%	26.1%
Office Furniture	\$110,788		\$81,872	\$28,916
Transportation Equipment	37,713		27,870	9,843
Power Operated Equipment	45,283		33,464	11,819
<b>Subtotal</b>	<b>\$193,784</b>		<b>\$143,206</b>	<b>\$50,578</b>
<b>Total</b>	<b>\$6,292,370</b>		<b>\$4,650,711</b>	<b>\$1,641,659</b>
Percentages	100%		73.9%	26.1%
<b>Allocation Percentages</b>	<b>100%</b>		<b>73.9%</b>	<b>26.1%</b>

Source: PSC Annual Report 2018

Allocation of Depreciation				
	<b>Total</b>	<b>Commodity</b>	<b>Demand</b>	<b>Customer</b>
Structures & Improvements	34,779		34,779	
Pumping Equipment	37,877		37,877	
Dist. Reservoirs & Standpipes	363,170		363,170	
Transmission & Distribution Mains	1,196,321		1,196,321	
Meters & Meter Installations	573,612			\$573,612
Hydrants	26,619			26,619
<b>Subtotal</b>	<b>\$2,232,378</b>		<b>\$1,632,147</b>	<b>\$600,231</b>
Allocation Percentages	100%		73.1%	26.9%
Office Furniture & Equipment	\$16,365		\$11,963	\$4,402
Transportation Equipment	23,135		16,912	6,223
Power Operated Equipment	34,216		25,012	9,204
Subtotal	\$73,716		\$53,887	\$19,829
<b>Total</b>	<b>\$2,306,094</b>		<b>\$1,686,034</b>	<b>\$620,060</b>
Percentages	100%		73.1%	26.9%
Source: PSC Annual Report 2018				

Allocation of Operation & Maintenance Expense				
	<b>Total</b>	<b>Commodity</b>	<b>Demand</b>	<b>Customer</b>
Salary	\$188,193		\$144,304	\$43,889
Employee Pension & Benefits	71,337		52,282	19,055
Purchased Water	519,605	519,605		
Purchased Power	17,266	17,266		
Transportation Expense	7,676		4,447	3,229
Insurance-Vehicle	4,998		2,895	2,103
Material & Supplies	70,387		50,153	20,234
Insurance-Workers Comp	4,266		3,199	1,067
Misc Expense	31,218		17,808	13,410
Bad Debt Expense	3,501			3,501
Contractual Services-Water Testing	5,933	5,933		
Subtotal	\$924,380	\$542,804	\$275,088	\$106,488
Less Commodity	(\$542,804)			
Total	\$381,576		\$275,088	\$106,488
Allocation Percentages	100%		72%	28%
Salaries & Wages-Admin	\$4,877		\$3,511	\$1,366
Salaries & Wages-Officers	\$12,173		8,765	3,408
Employee Pension & Benefits	\$1,556		1,120	436
Contractual Services- Legal & Accou	\$25,697		18,502	7,194
Taxes Other Than Income	\$14,574		10,493	4,081
Misc Expense	\$7,963		5,733	2,230
Insurance-General Liability	\$11,663		8,397	3,266
Subtotal	\$78,503		\$56,521	\$21,981
<b>Operating Expenses</b>	<b>\$1,002,883</b>	<b>\$542,804</b>	<b>\$331,609</b>	<b>\$128,469</b>

Allocation of Cost of Service				
	<b>Total</b>	<b>Commodity</b>	<b>Demand</b>	<b>Customer</b>
Operation & Maintenance	\$1,002,883	\$542,804	\$331,609	\$128,469
Operating Ratio	157,235		116,197	41,038
Depreciation	150,168		109,773	40,395
Interest Expense	51,991		38,421	13,570
General Water Service Cost	1,362,277	\$542,804	\$596,000	\$223,472
Less Other Operating Revenue:				
Nonutility Income	(30)			(30)
Interest Income	(5,371)			(5,371)
Other Operating Revenue	(\$47,196)			(\$47,196)
<b>Revenue Required from Rates</b>	<b>\$1,309,680</b>	<b>\$542,804</b>	<b>\$596,000</b>	<b>\$170,875</b>

NOTES:

Operating Ratio and Interest Expense has been allocated on a percentage of Plant Value Sheet.  
 Depreciation has been allocated on a percentage of Depreciation Sheet.

Calculation of Water Rates					
	<b>Total</b>	<b>First 2,000 gallons</b>	<b>Next 8,000 gallons</b>	<b>Next 140,000 gallons</b>	<b>Over 150,000 gallons</b>
Actual Water Sales:					
Thousand Gallons	153,187,502	56,472,202	77,596,400	6,160,000	12,958,900
Percent	100%	36.9%	50.7%	3.9%	8.5%
Weighted Sales for Demand:					
Thousand Gallons	263,682,092	112,944,404	129,585,988	8,192,800	12,958,900
Percent	100%	42.8%	49.1%	3.2%	4.9%
Allocation of Volumetric Costs:					
Commodity	\$542,804	\$200,295	\$275,202	\$21,169	\$46,138
Demand	596,000	255,088	292,636	19,072	29,204
Customer	170,875	\$170,875			
Total	\$1,309,680	\$626,258	\$567,838	\$40,241	\$75,342
Number of Bills	31,803				
<b>Proposed Rates</b>		<b>\$19.69</b>	<b>\$7.32</b>	<b>\$6.53</b>	<b>\$5.81</b>

Verification of Rates				
	<b>Bills</b>	<b>Gallons</b>	<b>Rate</b>	<b>Revenue</b>
First 2,000 gallons	31,803	56,472,202	\$ 19.69	626,201
Next 8,000 gallons		77,596,400	7.34	569,558
Next 140,000 gallons		6,160,000	6.53	40,225
Over 150,000 gallons		12,958,900	5.81	75,291
Total Revenue from Water Sales				1,311,275
Other Operating Revenue:				
Nonutility Income				30
Interest Income				5,371
Other Operating Revenue				47,196
<b>Total Operating Revenue</b>	<b>31,803</b>	<b>153,187,502</b>		<b>1,363,872</b>

Comparison of Rates				
Gallon Usage	Current Rates	Cost of Service Rates	Increase	Percentage
1,000	\$18.20	\$19.69	\$1.49	8.2%
2,000	18.20	19.69	1.49	8.2%
3,000	24.30	27.03	2.73	11.2%
4,000	30.40	34.37	3.97	13.1%
5,000	36.50	41.71	5.21	14.3%
6,000	42.14	49.05	6.91	16.4%
7,000	47.78	56.39	8.61	18.0%
8,000	53.42	63.73	10.31	19.3%
9,000	59.06	71.07	12.01	20.3%
10,000	64.70	78.41	13.71	21.2%
15,000	90.50	111.11	20.61	22.8%
20,000	116.30	143.81	27.51	23.7%
25,000	142.10	176.51	34.41	24.2%
30,000	167.90	209.21	41.31	24.6%
35,000	193.70	241.91	48.21	24.9%
40,000	219.50	274.61	55.11	25.1%
50,000	271.10	340.01	68.91	25.4%
75,000	400.10	503.51	103.41	25.8%
100,000	529.10	667.01	137.91	26.1%
150,000	787.10	994.01	206.91	26.3%
200,000	1,045.10	1,255.46	210.36	20.1%
250,000	1,303.10	1,575.01	271.91	20.9%
300,000	1,561.10	1,865.51	304.41	19.5%
350,000	1,819.10	2,156.01	336.91	18.5%
500,000	2,593.10	3,027.51	434.41	16.8%
750,000	3,883.10	4,480.01	596.91	15.4%
1,000,000	5,173.10	5,932.51	759.41	14.7%
1,500,000	7,753.10	\$8,837.51	1,084.41	14.0%

Comparison of Rates			
Current Rates		Proposed rates	
Block Usage		Block Usage	
First 2,000 gallons	\$18.20	First 2,000 gallons	\$19.69
Next 3,000 gallons	6.10	Next 8,000 gallons	7.34
Next 5,000 gallons	5.64	Next 140,000 gallon	6.54
Over 10,000 gallons	5.16	Over 150,000 gallon	5.81

Effect on Customer Average Bill - 4,000 Gallons Usage			
Current Rates	Proposed Rates	Amount Increase	% Increase
30.40	34.37	3.97	13.10%

APPENDIX B

APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2020-00021 DATED APR 27 2020

Staff Calculated Monthly Water Rates

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

First	2,000 gallons	\$19.69	Minimum bill
Next	8,000 gallons	7.34	per 1,000 gallons
Next	140,000 gallons	6.54	per 1,000 gallons
Over	150,000 gallons	5.81	per 1,000 gallons

1-Inch Meter

First	5,000 gallons	\$41.71	Minimum bill
Next	5,000 gallons	7.34	per 1,000 gallons
Next	140,000 gallons	6.54	per 1,000 gallons
Over	150,000 gallons	5.81	per 1,000 gallons

4-Inch Meter

First	50,000 gallons	\$340.01	Minimum bill
Next	50,000 gallons	7.34	per 1,000 gallons
Next	50,000 gallons	6.54	per 1,000 gallons
Over	150,000 gallons	5.81	per 1,000 gallons

APPENDIX C

APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2020-00021 DATED APR 27 2020

Staff Billing Analysis

**Billing Analysis for: Farmdale District**  
**Test Period From: January to December 2018**

Meter Size	Gallons Sold	Revenue	Bills
5/8 inch	122,026,902	\$1,094,865	30745
5/8 inch 1 Trailer	394,400	3,649	90
5/8 inch 2 Trailers	192,500	1,642	40
1 inch	14,240,000	108,878	868
1 inch	1,133,700	7,214	24
4 inchSH	15,200,000	93,984	36
<b>Total Revenue</b>	<b>153,187,502</b>	<b>\$1,310,233</b>	<b>31803</b>

**Meter Size: 5/8 inch**

	USAGE	BILLS	GALLONS	FIRST 2,000	NEXT 8,000	NEXT 140,000	OVER 150,000
FIRST	2,000	8522	9,685,702	9,685,702			
NEXT	8,000	15362	52,192,700	30,724,000	21,468,700		
NEXT	140,000	5734	37,810,400	11,468,000	26,342,400		
OVER	150,000	1127	22,338,100	2,254,000	9,016,000	11,068,100	
		30745	122,026,902	54,131,702	56,827,100	11,068,100	0

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST 2,000	30745	54,131,702	\$19.69	\$605,369.05
NEXT 8,000		56,827,100	7.34	\$417,110.91
NEXT 140,000		11,068,100	6.54	\$72,385.37
OVER 150,000		0	5.81	\$0.00
<b>TOTAL</b>	<b>30745</b>	<b>122,026,902</b>		<b>\$1,094,865.34</b>

**Meter Size: 5/8 inch 1 Trailer**

	USAGE	BILLS	GALLONS	FIRST 2,000	NEXT 8,000	NEXT 140,000	OVER 150,000
FIRST	2,000	42	40,100	40,100			
NEXT	8,000	26	146,100	52,000	94,100		
NEXT	140,000	19	154,600	38,000	116,600		
OVER	150,000	3	53,600	6,000	24,000	23,600	
		90	394,400	136,100	234,700	23,600	0

REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	90	136,100	\$19.69	\$1,772.10
NEXT	8,000		234,700	7.34	\$1,722.70
NEXT	140,000		23,600	6.54	\$154.34
OVER	150,000		0	5.81	\$0.00
TOTAL		90	394,400		\$3,649.14

**Meter Size: 5/8 inch 2 Trailers**

	USAGE	BILLS	GALLONS	FIRST 2,000	NEXT 8,000	NEXT 140,000	OVER 150,000
FIRST	2,000	24	42,200	42,200			
NEXT	8,000	11	83,800	22,000	61,800		
NEXT	140,000	3	28,800	6,000	22,800		
OVER	150,000	2	37,700	4,000	16,000	17,700	
		40	192,500	74,200	100,600	17,700	0

REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	40	74,200	\$19.69	\$787.60
NEXT	8,000		100,600	7.34	\$738.40
NEXT	140,000		17,700	6.54	\$115.76
OVER	150,000		0	5.81	\$0.00
TOTAL		40	192,500		\$1,641.76

**Meter Size: 1 inch**

	USAGE	BILLS	GALLONS	FIRST 5,000	NEXT 5,000	NEXT 140,000	OVER 150,000
FIRST	5,000	437	1,037,200	1,037,200			
NEXT	5,000	183	1,293,000	915,000	378,000		
NEXT	140,000	231	8,163,300	1,155,000	1,155,000	5,853,300	
OVER	150,000	17	3,746,500	85,000	85,000	2,380,000	1,196,500
		868	14,240,000	3,192,200	1,618,000	8,233,300	1,196,500

REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	5,000	868	3,192,200	\$41.71	\$36,204.28
NEXT	5,000		1,618,000	7.34	11,876.12
NEXT	140,000		8,233,300	6.54	53,845.78
OVER	150,000		1,196,500	5.81	6,951.67
TOTAL		868	14,240,000		\$108,877.85

**Meter Size: 1 inch**

	USAGE	BILLS	GALLONS	FIRST 5,000	NEXT 5,000	NEXT 140,000	OVER 150,000
FIRST	5,000	2	8,200	8,200			
NEXT	5,000	9	64,300	45,000	19,300		
NEXT	140,000	12	232,300	60,000	60,000	112,300	
OVER	150,000	1	828,900	5,000	5,000	140,000	678,900
		24	1,133,700	118,200	84,300	252,300	678,900

REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	5,000	24	118,200	\$41.71	\$1,001.04
NEXT	5,000		84,300	7.34	618.76
NEXT	140,000		252,300	6.54	1,650.04
OVER	150,000		678,900	5.81	3,944.41
TOTAL		24	1,133,700		\$7,214.25

**Meter Size: 4 inchSH**

	USAGE	BILLS	GALLONS	FIRST 50,000	NEXT 50,000	NEXT 50,000	OVER 150,000
FIRST	50,000	9	288,000	288,000			
NEXT	50,000	1	57,000	50,000	7,000		
NEXT	50,000	0	0	0	0	0	
OVER	150,000	26	14,855,000	1,300,000	1,300,000	1,300,000	10,955,000
		36	15,200,000	1,638,000	1,307,000	1,300,000	10,955,000

REVENUE BY RATE INCREMENT

		BILLS	GALLONS	RATE	REVENUE
FIRST	50,000	36	1,638,000	\$340.01	\$12,240.36
NEXT	50,000		1,307,000	7.34	9,593.38
NEXT	50,000		1,300,000	6.54	8,502.00
OVER	150,000		10,955,000	5.81	63,648.55
TOTAL		36	15,200,000		\$93,984.29

## APPENDIX D

### APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2020-00021 DATED APR 27 2020

#### Tariff Language

Staff Language Recommendation for when more than one residential property is being served water service through a single meter.

Add to section 5.f. of current tariff:

Multiple user meter connections that existed before March 16, 2020, where two or more residences, apartment units, mobile homes, businesses, or family units residing in a duplex or other multiunit premise being served by a single meter will be allowed to continue until such time as the District directs otherwise. Customers will be required to purchase their own individual meter when property covered by this exemption changes ownership.

Add section 5. g. 3. To current tariff:

The bill will consist of a charge in the amount of the utility's minimum bill multiplied by the number of units the meter serves. The amount of water included with a minimum bill will be multiplied by the number of units and deducted from the total amount of consumption. The remaining consumption will be billed at the appropriate level in accordance with the current effective tariffed rates.

APPENDIX E

APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2020-00021 DATED APR 27 2020

Determination of Non-Regulated Operating Costs

	<u>Customer Account and Administrative</u>		<u>Meter Reading</u>		<u>Total Allocation</u>
	<u>Amounts Subject to Allocation</u>	<u>33.31% Allocated to Account 416</u>	<u>Amounts Subject to Allocation</u>	<u>12.89% Allocated to Account 416</u>	
Operating Expenses:					
Salaries and Wages - Employees	\$ 114,899	\$ 38,273	\$ 4,248	\$ 548	\$ 38,821
Employee Pensions and Benefits	31,122	10,367	1,965	253	10,620
Payroll Taxes	8,790	2,928	325	42	2,970
Salaries and Wages - Commissioners	7,185	2,393	266	34	2,427
Transportation		0	530	68	68
Miscellaneous	36,076	12,017		0	12,017
Depreciation	337	112	71,193	9,177	9,289
Total Operating Expenses	<u>\$ 198,409</u>	<u>\$ 66,090</u>	<u>\$ 78,527</u>	<u>\$ 10,122</u>	<u>\$ 76,212</u>

Customer Account and Administrative Expenses

Farmdale District supplies water service to 2,655 customers. Of these customers, 1,326 currently receive sewer service from the two sewer utilities to which Farmdale District provides contracted billing and collection services. Farmdale District has three full-time office employees who, under supervision of its Commissioners, maintain the customer account information for all water and sewer customers and provide administrative services to all customers. The amount of time that Farmdale District office employees dedicate to water and sewer operations is directly related to the number of customers served; therefore, it is reasonable to allocate 33.31 percent of Farmdale District's customer account and administrative costs to non-regulated operations using ratio of sewer customers served to the total number of customers served, as calculated below.

	No. of Customers	Percentage
Frankfort	393	
Farmdale Sanitation District	933	
Number of Sewer Customers	1,326	33.31%
Divide by: Number of Water Customers	2,655	66.69%
Total Water and Sewer Customers	<u>3,981</u>	<u>100.00%</u>

As listed in the table above and explained below, Staff identified \$198,409 in pro forma customer account and administrative expenses for which allocation is necessary. Staff allocated 33.31 percent of these expenses to Account 416.

(1) Wages and Wage Overhead Charges. Pro forma customer account and administrative employee wages that were subject to allocation totaled \$114,899. This amount includes 100 percent of the pro forma wages Farmdale District paid to its office staff, including its Office Manager. The pro forma employee benefits<sup>1</sup> and payroll taxes<sup>2</sup> that Farmdale District paid for its office staff should also be subject to allocation. Since Farmdale District's Commissioners oversee all employees, Staff attributed 49.21 percent<sup>3</sup> to the management of office staff as calculated in the table below.

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	CERS	Life Insurance	Subject to Allocation
Office Clerk	\$ 9,333	\$ 95	\$ 9,428
Office Manager	\$ 14,345	\$ 62	14,407
Office Clerk	\$ 7,287	\$ -	7,287
Total Pro Forma Benefits Office Staff			<u>\$ 31,122</u>

<sup>2</sup> \$114,899 (Office Staff Pro Forma Salaries) x 7.65% (FICA Tax Rate) = \$8,790.

<sup>3</sup> The ratio of administrative and general wages to total pro forma wages expensed by Staff of the Commissioner's wages.

Admin. & General Salaries and Wages	\$ 114,899
Divide by Total Payroll	<u>233,509</u>
% Payroll Admin & gen	49.21%
Multiplied by: Commissioner Fees Exp	<u>14,600</u>
Total Subject to Allocation	<u>\$ 7,185</u>

(2) Miscellaneous Expenses. As listed below, Staff identified \$36,076 of reported Miscellaneous Expenses incurred to operate Farmdale District's office and maintain customer accounts. These expenses must be allocated to Account 416.

Office Supplies	\$ 5,250
Office Maintenance	12,331
Telephone	2,413
Office Utilities	4,523
Postage	<u>11,559</u>
Total Subject to Allocation	<u>\$ 36,076</u>

(3) Depreciation Expense. Depreciation Expense of \$337 was included in pro forma operations that accrued on Farmdale District's office building and office equipment. This depreciation is a customer account and administrative expense that must be allocated to Account 416.

#### Meter Reading and Meter Costs

Farmdale District calculates the monthly bill of each sewer customer served by Frankfort by applying Frankfort's volumetric sewer rate to the sewer customer's metered water usage. The water usage is determined by Farmdale District using its employees and water-metering equipment. Franklin Sanitation assess a flat monthly rate that is not based on water usage. Since Farmdale District's water meter readings benefit the contracted operations provided to Frankfort, it is necessary to allocate a portion of Farmdale District's meter reading and meter costs to its non-regulated operations.

As listed in the table on page 1 of this Appendix, Staff identified \$58,255 in pro forma operating expenses that are related to meter reading. Of these costs, Staff believes

that 12.89 percent (the percentage of sewer bills generated from the meter readings when compared to the total number of water and sewer bills generated from the meter readings) should be allocated to non-regulated operations.

	<u>Meter Reading</u>	
Frankfort	393	12.89%
Divide by: Number of Water Customers	<u>2,655</u>	<u>87.11%</u>
Total Water and Sewer Customers	<u><u>3,048</u></u>	<u><u>100.00%</u></u>

(4) Wage and Wage Overhead Charges. A Farmdale District representative explained that a field employee spends approximately two days per month performing meter readings, which equates to 9.23 percent<sup>4</sup> of his total annual workdays. Accordingly, Staff attributed \$2,688, or 9.23 percent of the employee's \$29,120 annual wage, to meter reading. This amount represents 3.75 percent<sup>5</sup> of the two field employees' total wage expense. Since the General Manager spends 100 percent of his time dedicated to field operations, Staff attributed \$1,560<sup>6</sup> of the General Manager's annual wages to meter reading, based on the ratio of the field employee's wages to meter reading. The pro forma

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<sup>4</sup> 24 (Annual Reading Meters Days) ÷ 260 (Annual Workdays) = 9.23%.

<sup>5</sup> \$2,988 (Meter Reading Labor) ÷ \$71,760 (Total Field Employee Wages) = 3.75%.

<sup>6</sup> \$41,600 (General Manager Salary) x 3.75% (% Meter Reader to Outside Wages) = \$1,560.

employee benefits<sup>7</sup> and payroll taxes<sup>8</sup> that Farmdale District paid for its maintenance staff should also be subject to allocation. Since Farmdale District's Commissioners oversee all employees, Staff attributed 1.82 percent,<sup>9</sup> the ratio of meter reading salaries to total pro forma wages expensed by Staff, of the Commissioner's wages to meter reading costs as calculated in the below.

Meter Reading Salaries and Wages	\$	4,248
Divide by Total Payroll		<u>233,509</u>
% Payroll Meter Reading		1.82%
Multiplied by: Commissioner Fees Exp		<u>14,600</u>
Total Subject to Allocation	\$	<u><u>266</u></u>

(5) Transportation. The field employee uses Farmdale District's transportation equipment to read meters. Costs associated with this equipment include, but may not be limited to, fuel, maintenance, insurance, and depreciation. Instead of identifying and quantifying these test-year costs individually for allocation purposes, Staff estimated them collectively to be \$530 by multiplying the Internal Revenue Service's 2018 mileage rate, \$0.545, by Farmdale District's estimated annual miles driven to read meters during the

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	CERS	Health Ins.	Life Ins.	Totals
Manager	\$ 11,721	\$ 4,918	\$ 95	\$ 16,734
Field Worker/Meter Reader Reg. Salary	\$ 8,753	\$ 5,044	\$ 95	13,892
Field Worker	\$ 11,491	\$ 10,274	\$ -	<u>21,765</u>
Subtotal				52,391
% reading Meters				<u>3.75%</u>
Total Subject to Allocation				<u><u>\$ 1,965</u></u>

<sup>8</sup> \$4,248 (Allocated Salaries – Meter Reading) x 7.65% (FICA Tax Rate) = \$325.

<sup>9</sup> \$2,988 (Meter Reading Labor) ÷ \$233,509 (Total Payroll) = 1.82%.

test year, 972. Staff believes that this method results in a fair estimate, in all material respects, of Farmdale District's actual meter-reading transportation costs.

(6) Depreciation. As shown in Reference Item (K) of Staff's report, Staff calculated pro forma depreciation on the original cost of Farmdale District's Meter Installations, Meters, and AMR System to be \$3,885, \$65,546, and \$1,762, respectively.

\*Honorable Damon R Talley  
Attorney at Law  
Stoll Keenon Ogden PLLC  
P.O. Box 150  
Hodgenville, KENTUCKY 42748

\*Farmdale Water District  
100 Highwood Drive, Route 8  
Frankfort, KY 40601

\*Jan Sanders  
Secretary  
Farmdale Water District  
100 Highwood Drive, Route 8  
Frankfort, KY 40601

\*Katelyn L. Brown  
Attorney  
STOLL KEENON OGDEN PLLC  
300 West Vine Street  
Suite 2100  
Lexington, KENTUCKY 40507-1801