

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE ADJUSTMENT FILING OF) CASE NO.
FARMDALE WATER DISTRICT) 2013-00485

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of April 15, 2014, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to paragraph 4 of the Commission's April 15, 2014 Order, Farmdale Water District is required to file written comments regarding the findings of Commission Staff no later than July 14, 2014.



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

DATED JUN 30 2014

cc: Parties of Record

STAFF REPORT
ON
FARMDALE WATER DISTRICT
CASE NO. 2013-00485

Farmdale Water District ("Farmdale District") provides water service to approximately 2,609 customers residing in Anderson, Franklin, and Shelby counties, Kentucky.¹ On December 30, 2013, Farmdale District tendered an application to the Commission pursuant to 807 KAR 5:076 requesting to adjust its water service rates, its tap fees, and its reconnection fee.

The requested water service rates would increase the cost of 5,000 gallons of water purchased through a 5/8-inch x 3/4-inch meter from \$24.22 to \$35.09, an increase of \$10.87, or 44.88 percent. Farmdale District stated that these rates would increase its annual revenues by \$404,915, or 45 percent. Farmdale District provided financial exhibits with its Application in support of the requested increase that were based on the test year ended December 31, 2012. These exhibits are shown below in condensed form and demonstrate that Farmdale District's operations, as presented by Farmdale District, support a revenue increase of \$253,026, or 32.89 percent. Farmdale District did not reconcile the difference between the 45 percent revenue increase requested in its Application and the 32.89 percent supported by its financial exhibits.

¹ *Annual Report of Farmdale Water District to the Public Service Commission for the Calendar Year Ended December 31, 2012 ("2012 Annual Report")* at 5.

Overall Revenue Requirement and
Required Revenue Increase as Presented by
Farmdale District

Pro Forma Operating Expenses	\$ 1,124,875
Plus: Average Annual Debt Payments	<u>111,375</u>
Overall Revenue Requirement	1,236,250
Less: Other Operating Revenue	(102,440)
Nonutility Income	<u>(111,548)</u>
Revenue Required From Rates	1,022,262
Less: Pro Forma Present Rate Service Revenues	<u>(769,236)</u>
Required Revenue Increase	<u>\$ 253,026</u>
Percent Increase	<u>32.89%</u>

Pro Forma Operating Statement
as Presented by Farmdale District

	Test Year	Adjustments	Pro Forma
Operating Revenues			
Sales of Water	\$ 683,169	\$ 86,067	\$ 769,236
Other Water Revenue	98,310	4,130	102,440
Total Operating Revenue	<u>781,479</u>	<u>90,197</u>	<u>871,676</u>
Operating Expenses			
Operation and Maintenance	781,068	198,800	979,868
Taxes Other Than Income	34,413	2,345	36,758
Depreciation	59,909	48,340	108,249
Total Operating Expenses	<u>875,390</u>	<u>249,485</u>	<u>1,124,875</u>
Net Operating Income	(93,911)	(159,288)	(253,199)
Plus: Non Operating Revenue	<u>82,400</u>	<u>29,148</u>	<u>111,548</u>
Income Available to Service Debt	<u>\$ (11,511)</u>	<u>\$ (130,140)</u>	<u>\$ (141,651)</u>

Farmdale District requested to adjust its tap fees and its reconnection fee as shown below. Farmdale District provided cost justification worksheets as part of its Application to support the amounts requested.

	Proposed	Current	Increase	Percent Increase
Tap-on Charges:				
5/8-Inch x 3/4-Inch	\$ 1,655	\$ 590	\$ 1,065	181%
1-Inch	Actual Cost	675		
Reconnection Charge	60	15	45	300%

Staff performed a limited financial review of Farmdale District's operations for the test year ended December 31, 2012, to determine the reasonableness of the requested water service rates and nonrecurring charges. 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 to be material. Insignificant or immaterial discrepancies were not pursued and were not addressed.

Staff's findings are summarized in this report. Jack Scott Lawless and Ariel Turnbull reviewed the calculation of Farmdale District's Overall Revenue Requirement. Eddie Beavers reviewed revenues, rate design, and nonrecurring charges.

Summary of Findings

1) Overall Revenue Requirement and Required Revenue Increase. By applying the Debt Service Coverage ("DSC") Method, as generally accepted by the Commission, Staff found Farmdale District's Overall Revenue Requirement to be \$1,054,543 and that a revenue increase of \$239,847, or 32.57 percent, above pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2) Water Service Rates. Farmdale District proposes an across-the-board increase in rates of 45 percent. Farmdale District has not performed a cost-of-service study. The Commission has previously found that an across-the-board increase is an appropriate and equitable method of cost allocation in the absence of a cost-of-service study. Staff has not been able to locate a cost-of-service study in any previous case for Farmdale District and has performed such a study and calculated rates based upon the findings in this study. Attachment E to this report is the cost-of-service study performed by Staff. The rates are based upon this cost-of-service study and will produce revenues of at least \$976,210 from water sales. The cost-of-service study rates have been adjusted to reflect the change to the rate structure and meet to the revenue requirement as calculated. The revenue requirement as calculated by Staff is less than the requested amount. Staff's proposed rates are shown in Attachment A.

The cost-of-service study 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 varying usage.

The Allocation of Expenses sheet of the following cost-of-service study shows the allocation of Operation and Maintenance expenses to the functional cost components. Staff utilized information obtained through the utility's application, 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.

3) Nonrecurring Charges. Farmdale District proposes to increase its 5/8-inch x 3/4-inch Meter Connection Fee, 1-inch Meter Connection Fee and its Cutoff and Reconnection Fee charges. Farmdale District proposes to increase its 5/8-inch x 3/4-inch Meter Connection Fee from \$590 to \$1,655, its 1-inch Meter Connection Fee from \$675 to the actual cost of setting the meter, and its Cutoff and Reconnection Fee from \$15 to \$60. In support of its proposed increases in fees, Farmdale District filed with the application Cost Justification Sheets. In response to a request for information,² Farmdale District noted several errors and omissions in the calculation of its 5/8-inch x 3/4-inch Meter Connection Fee. Staff has applied this information and recalculated a 5/8-inch x 3/4-inch Meter Connection Fee of \$1,132. From the information provided by Farmdale District, Staff believes that a 5/8-inch x 3/4-inch Meter Connection Fee of \$1,132 is correct and has used this amount in calculating its adjustment to the Revenue Requirement. Finally, Staff has reviewed Farmdale District's cost justification information for the 1-inch Meter Connection Fee and the Cutoff and Reconnection Fee and finds that they are cost based and should be approved by the Commission.

4) Depreciation. At Attachment B of this report, Staff finds that the depreciable lives assigned to certain assets should be changed for ratemaking purposes and that these lives should be used for accounting purposes in all future reporting periods. These recommended depreciable lives better match the life expectancy of Farmdale District's assets than the lives assigned by Farmdale District. Staff further finds that no adjustment to accumulated depreciation and retained earnings

² Farmdale Water District response to PSC Staff's Initial Request for Information, filed Apr. 28, 2014.

should be made to account for the retroactive effect of this recommended change in accounting estimates.

Pro Forma Operating Statement

Farmdale District reported \$781,068 for total test-year operation and maintenance expenses. It proposed to increase this amount to \$979,868, the amount shown in its 2014 annual budget. The budgeted amounts were developed by Farmdale District using inflationary factors. Pursuant to 807 KAR 5:076, Section 9, adjustments to historical test-year operations are permitted only for charges that are known and measurable.

The Commission has previously found that inflationary adjustments to historical financial statements are not known and measurable and must, therefore, be rejected.³ Following the Commission's prior rulings, Staff finds that Farmdale District's proposed budgetary adjustments do not meet the known and measurable requirement and should not be accepted for ratemaking purposes. The known and measurable adjustments to test-year revenues and expenses that Staff found appropriate are detailed in the Pro Forma Operating Statement shown below. Discussion of Staff's adjustments, and the adjustments proposed by Farmdale District that were not budget based, follows the Pro Forma Operating Statement.

³ See Case No. 8538, *Application of Marrowbone Water District to Increase the Rates Charged its Customers per 807 KAR 5:076* (Ky. PSC Aug. 13, 1982); Case No. 2002-00105, *Application of Northern Kentucky Water District for (A) an Adjustment of Rates; (B) a Certificate of Public Convenience and Necessity for Improvements to Water Facilities if Necessary; and (C) Issuance of Bonds* (Ky. PSC Apr. 30, 2003); and Case No. 2008-00563, *Application of Water Service Corporation of Kentucky for an Adjustment of Rates* (Ky. PSC Nov. 9, 2009).

	Test Year	Adjustment	(Ref.)	Pro Forma
Operating Revenues				
Water Sales Revenue	\$ 683,169	\$ (24,292)	(A)	
		77,486	(B)	\$ 736,363
Other Operating Revenues	98,310	(62,393)	(C)	
		12,549	(D)	48,466
Total Operating Revenues	781,479	3,350		784,829
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	133,051	18,720	(E)	
		(733)	(F)	
		(26,878)	(C)	124,160
Salaries and Wages - Commissioners	16,355	(2,911)	(C)	13,444
Employee Pensions and Benefits	63,726	2,754	(E)	
		(11,830)	(C)	54,650
Purchased Water	402,028	46,100	(G)	
		(27,336)	(H)	420,792
Purchased Power	23,809	(1,452)	(H)	22,357
Materials and Supplies	21,618	1,205	(F)	22,823
Contractual Services - Accounting	20,585			20,585
Contractual Services - Legal	11,618	(11,618)	(I)	
Contractual Services - Water Testing	3,247			3,247
Transportation Expenses	14,246	(1,500)	(F)	
		(70)	(C)	12,676
Insurance - Vehicle	4,051			4,051
Insurance - General Liability	6,077			6,077
Insurance - Worker's Compensation	3,057			3,057
Advertising Expenses	363			363
Bad Debt Expense	7,541	(4,649)	(J)	2,892
Miscellaneous Expense	49,696	(5,000)	(K)	
		(8,490)	(C)	36,206
Total Operation and Maintenance Expenses	781,068	(33,688)		747,380
Taxes Other Than Income	34,413	(24,292)	(A)	
		1,432	(E)	
		(2,056)	(C)	9,497
Depreciation	59,909	132,375	(L)	
		(10,916)	(C)	181,368
Total Operating Expenses	875,390	62,855		938,245
Net Operating Income	(93,911)	(59,505)		(153,416)
Interest Income	3,333			3,333
Revenues from Merchandising, Jobbing and Contract Work		88,015	(C)	88,015
Costs and Expenses of Merchandising, Jobbing, and Contract Work		(63,151)	(C)	(63,151)
Nonutility Income	561,532	(557,313)	(C)	
		(2,549)	(M)	1,670
Miscellaneous Nonutility Expenses	(499,456)	499,456	(C)	
Income Available to Service Debt	\$ (28,502)	\$ (95,047)		\$ (123,549)

(A) Water Sales Revenue. 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 are remitted to the Commonwealth of Kentucky. Farmdale District improperly reported test-year tax collections in the amount of \$24,292 as revenues and tax remittances, in the same amount, as an expense. Farmdale District is acting as a collecting agent for the taxing authorities. The collection of these taxes is not revenue, nor is the remittance thereof an expense. Accordingly, Staff removed these amounts from test-year operations.

(B) Billing Analysis Adjustment. Farmdale District provided a billing analysis with its application that calculated water sales revenue of \$1,174,151 for all customers. Farmdale District had made errors in its billing analysis for customers with 1-inch meters. During Staff's field review, Staff requested information to help correct the errors. Attachment D is the billing analysis performed by Staff from information provided by Farmdale District. Water Sales revenue has been adjusted by \$437,787 to a normalized revenue of \$736,363.

Farmdale District's rate structure does not contain a rate differential for a 4-inch meter, although one customer, a residential facility known as the Stewart Home & School ("Stewart Home"), is served by a 4-inch meter. Farmdale District has utilized the 1-inch meter rate structure, which has not caused any detriment to either the Stewart Home or Farmdale District.

Farmdale District has been servicing the Stewart Home for numerous years and the current staff at Farmdale District is unclear why the rate structure for Stewart Home was never adjusted to reflect the 4-inch meter service. In this case, Farmdale District

has not requested to set a rate structure for 4-inch meters. Staff is proposing to alter the rate structure for the 1-inch meters and the 4-inch meters to better reflect the industry-wide accepted rate structures for these meter sizes, with the rates to those developed as part of the Cost of Service Study Rates. A Billing Analysis has been provided as Attachment F with the rates and altered rate structure as proposed by staff.

(C) Non-Regulated Contracted Operations. During the test year, Farmdale District provided contracted billing and collection services to the Frankfort Sewer Department (“Frankfort”), Ridgelea Investments (“Ridgelea”), Farmdale Development Corp. (“Farmdale Corp”), and Coolbrook Utilities (“Coolbrook”). Subsequent to the test year, Farmdale District began providing billing and collection services to Evergreen Sewage Disposal (“Evergreen”) pursuant to a contract dated July 1, 2013.

Pursuant to these contracts, Farmdale District bills and collects the base sewer rates and surcharges that are in effect for each sewer utility. It remits 85 percent of the amounts collected to the appropriate sewer utility while retaining 15 percent of the collections as its contracted fee, except for the surcharge collected on behalf of Farmdale Corp, which is remitted in full.⁴ During the test year, Farmdale District reported revenues and expenses from its contracted billing and collection services using the accounts shown below.

⁴ During the test year, Farmdale District collected surcharges on behalf of Frankfort, Ridgelea, and Farmdale Corp. It had a verbal agreement with Farmdale Corp that exempted Farmdale Corp’s surcharge from the 15 percent collection fee. Farmdale Corp’s surcharge expired subsequent to the test year and is no longer collected by Farmdale District.

Account	Description	Amount
471, Miscellaneous Service Revenue	Surcharge Collections	\$ 62,393
421, Nonutility Income	Base Rate Collections	\$519,436
	Unearned Revenue	<u>37,877</u> 557,313
Reported Contracted Revenues		619,706
426, Miscellaneous Nonutility Expense	Remitted to Sewer Utilities	<u>(499,456)</u>
Increase to Net Income		<u><u>\$ 120,250</u></u>

Staff disagrees with the accounts used by Farmdale District to report its contracted operations, as well as the amounts reported to those accounts. Farmdale District's contracted services are not regulated by the Commission. The Uniform Systems of Accounts ("USoA") requires that all revenues derived from nonregulated, contractual services be reported "below-the-line" using account 415, Revenues from Merchandising, Jobbing and Contract Work, and that all expenses attributed to those services be charged to account 416, Costs and Expense of Merchandising and Contract Work.⁵

The revenues reported by Farmdale District, in the total amount of \$619,706, represent all collections made by Farmdale District on behalf of the sewer utilities. Of this amount, \$581,829⁶ represents collections made by Farmdale District on behalf of the sewer utilities, which represents revenue to the sewer utilities for the services they

⁵ Uniform System of Accounts for Class A/B Water Districts and Associations ("USoA"), page 84.

⁶

Surcharge Collections	\$ 62,393
Base Rate Collections	<u>519,436</u>
Total	<u><u>\$ 581,829</u></u>

provided their customers during the test year. These collections are not revenue to Farmdale District. 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.⁷ The collections made by Farmdale District on behalf of the sewer utilities are not earned revenues earned by Farmdale District. They were earned by the sewer utilities through the provision of sewer services. They should be reported as revenues only by those sewer utilities, not by Farmdale District. Staff decreased test-year Miscellaneous Service Revenues by \$62,393 and decreased test-year Nonutility Income by \$519,436.

From Farmdale District's accounting records, Staff determined that the remaining \$37,877 reported as revenue by Farmdale District represents voluntary advanced payments made by sewer customers for sewer service that had not been provided as of the end of the test year. At the end of the test year, Farmdale District held these prepayments with its cash reserves. It does not remit prepayments until after the sewer utilities provide service and earn the prepaid revenue. While the prepayments are held by Farmdale District, they are subject to refund to the sewer customer and are a liability that Farmdale District should report using account 253, Other Deferred Credits.⁸ At no time should these liabilities be reported by Farmdale District as revenue. Staff removed the advanced payments from Farmdale District's Nonutility Income.

The amount Farmdale District should have reported to account 415 as test-year revenues from its non-regulated, contract services is \$82,400. This amount was

⁷ See Financial Accounting Standards Board, Accounting Standards Codification 605-10-25-1.

⁸ USoA, page 61.

determined by multiplying the amounts collected by Farmdale District on behalf of the sewer utilities, exclusive of customer prepayments and Farmdale Corp's surcharge, by Farmdale District's 15 percent collection fee.⁹ As explained below, Staff identified known and measurable adjustments that increased the test-year amount to \$88,015.

On July 1, 2012, and July 1, 2013, Frankfort increased its sewer service rates by 3.2 percent and 2.5 percent, respectively. As a result, Frankfort's sewer revenues will increase by the same percentages. Because Farmdale District's contracted billing and collection fees are calculated as a percentage of Frankfort's revenues, Farmdale District's contracted fees from Frankfort will also increase by the percentage of

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Total Collections on Behalf of Sewer Utilities	\$ 619,706
Less: Prepayments	(37,877)
Farmdale Corp Surcharge Collections	<u>(32,494)</u>
 Collections Subject to 15 Percent Fee	 549,335
Times: 15 Percent	<u>15%</u>
 Farmdale District's Test-Year Billing and Collection Revenue	 <u>\$ 82,400</u>

Frankfort's rate increases. Staff determined that Farmdale District's test-year contract fees will increase by \$1,367¹⁰ as a result of Frankfort's sewer rate increases.

Likewise, on August 30, 2012, Coolbrook increased its sewer service rates by 7.2 percent. By applying this percentage to Farmdale District's contracted revenues from Coolbrook prior to August 30, Staff determined that Farmdale District's test-year contracted revenues will increase by \$1,296.¹¹

In addition, the Evergreen contract dated July 1, 2013, will provide additional revenue to Farmdale District. Staff determined the amount of the annual revenue to be

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Contract Revenue from Rates in Effect Prior to July 1, 2012	\$	17,369	
Times: Percentage Rate Increase Effective July 1, 2012		<u>3.20%</u>	
Increase to Test Year Due to July 1, 2012 Rate Increase		556	\$ 556
Add: Test-Year Contract Revenues from Frankfort		<u>31,870</u>	
Normalized Test Year for July 1, 2012 Rate Increase		32,426	
Times: Percentage Rate Increase Effective July 1, 2013		<u>2.50%</u>	
Increase Due to Rates Effective July 1, 2013		<u>811</u>	<u>811</u>
Increase to Contract Fees Collected from Frankfort			<u>\$ 1,367</u>

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Contract Revenue from Rates in Effect Prior to August 30, 2012	\$	18,003
Times: Percentage Rate Increase Effective August 30, 2012		<u>7.20%</u>
Increase to Contract Fees from Coolbrook		<u>\$ 1,296</u>

\$2,952 by multiplying the revenues reported by Evergreen from sewer rates in its 2012 Annual Financial and Statistical Report filed with the Commission by 15 percent.¹²

As summarized below, Staff calculated Farmdale District's total pro forma contracted billing and collection revenues that should be reported to account 415 to be \$88,015.

Test-Year Billing and Collection Revenues	\$ 82,400
Increase in Test-Year Fees Collected from Frankfort	1,367
Increase in Test-Year Fees Collected from Coolbrook	1,296
Increase Due to Addition of Evergreen Contract	<u>2,952</u>
 Total Pro Forma Contracted Billing and Collection Revenue	 <u>\$ 88,015</u>

Farmdale District's records indicate that it collected \$619,706 in sewer fees on behalf of the sewer utilities during the test year and that it remitted \$499,456 of these collections to the sewer utilities. As Farmdale District incorrectly reported the collections as revenues, it also incorrectly reported the remittances as an expense.

The remittances should be reported on Farmdale District's Balance Sheet as a reduction to the liability that Farmdale District should accrue when it issues sewer bills on behalf of the sewer utilities. They should not be reported on Farmdale District's Income Statement as an expense that is charged against contracted revenue. Staff removed the remittances from test-year expenses.

¹²

2012 Sewer Service Revenues	\$ 19,680
Times: 15 Percent Collection Fee	<u>15%</u>
 Contract Revenue	 <u>\$ 2,952</u>

As summarized in the table below, Staff found that, through application of the “fully distributed cost method,”¹³ pro forma operating expenses totaling \$63,151 which are related to the customer account, administrative, and meter reading functions should be reported “below-the-line,” using account 416 to be matched against the non-regulated revenues Staff reported to account 415. The amounts shown in the table are calculated and discussed in full detail in Attachment C of this report.

¹³ KRS 278.2203 (2)(1) requires the allocation of costs between regulated and non-regulated operations using either: 1) the fully distributed cost method, or 2) a method recognized or mandated by the rules of the SEC, FERC, or USDA. Finding that neither the SEC, FERC, nor USDA has recognized or mandated an allocation method for Farmdale District, Staff applied the fully distributed method.

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 non-regulated activities and assess its profitability. Through application of this method, Staff identified direct costs and indirect costs related to Farmdale District’s non-regulated operations that were allocated to account 416 using logical methods as required by the Commission in Administrative Case No. 369, *An Investigation of the Need for Affiliate Transaction Rules and Cost Allocation Requirements for all Jurisdictional Utilities* (Ky. PSC Dec. 20, 1999).

In Administrative Case No. 369, the Commission defined the fully distributed cost method as requiring “the examination of all costs of an entity in relation to all the goods and services that are produced. All costs incurred directly or indirectly to produce a good or service must be recognized as a cost of that good or service. Costs are assigned either directly or using a logical basis for allocation. Costs that cannot be directly assigned or indirectly allocated must be included in the fully distributed cost calculation through a general or common allocation.” Final Order, Appendix A at 2 (Ky. PSC Dec. 20, 1999).

	Customer Account and Administrative		Meter Reading		
	Amount Subject to Allocation	33.34% Allocated to Acct 416	Allocation	12.92% Allocated to Acct 416	Total Allocation
Operating Expenses					
Wages - Employees	\$ 79,513	\$ 26,510	\$ 2,848	\$ 368	\$26,878
Employee Benefits	34,998	11,668	1,254	162	11,830
Payroll Taxes	6,083	2,028	218	28	2,056
Wages - Commissioners	8,610	2,871	308	40	2,911
Transportation		-	539	70	70
Miscellaneous	25,465	8,490		-	8,490
Depreciation	2,976	992	76,814	9,924	10,916
Total Operating Expenses	\$ 157,644	\$ 52,559	\$ 81,981	\$ 10,592	\$63,151

In summary, Staff's accounting for Farmdale District's non-regulated, contracted billing and collection services using accounts 415 and 416 produce "below-the-line" net income of \$24,864 before the allocation of interest on long-term debt.¹⁴ Farmdale District, being a non-profit organization, has no stockholders to receive dividend payments that are available from income after interest is paid to debt holders. Absent stockholders, it is appropriate to include the amounts reported to accounts 415 and 416 in the calculation of Farmdale District's Income Available to Service Debt. This method passes the benefits of the non-regulated services through to Farmdale District's rate payers.

¹⁴ The impact of Farmdale District's long-term debt on non-regulated operations, including interest expense, is shown in Attachment C.

415, Nonregulated Revenues	\$ 88,015
416, Nonregulated Expenses Allocated From Operating Expenses	<u>(63,151)</u>
 Net Income from Non-regulated Operations Before Interest Deduction	 <u>\$ 24,864</u>

(D) Other Operating Revenues – Reconnection Fee. As previously discussed, Staff found that Farmdale District should be allowed to increase its reconnection fee from \$15 to \$60, a 300 percent increase. As shown below, Staff determined that this increase will result in additional annual revenues of \$12,549. Accordingly, Staff increased test-year Other Operating Revenue by this amount.

Test-Year Revenue from Reconnection Fee	\$ 4,183
Times: Percentage Increase	<u>300%</u>
Increase	<u>\$ 12,549</u>

(E) New Employee. Farmdale District hired a new full-time employee in August 2013 to assist with the operation and maintenance of its water distribution system. The new employee currently receives a benefit package that includes wages, payroll taxes, and insurance coverage. Retirement benefits will not be provided until March 10, 2015, one year after the end of his probationary period. Staff increased test-year expenses as follows to account for the cost of the new employee’s benefits that are currently incurred by Farmdale District. Retirement benefits were not included by Staff, since Farmdale District will not incur these costs until after March 10, 2015.

Wage (\$360 Weekly x 52 Weeks)	18,720
Insurance (\$229.54 Monthly x 12 Months)	2,754
Taxes (\$18,720 Wage x 7.65% Tax Rate)	1,432

(F) Capitalization of Test-Year Meter Installations. During the test year, Farmdale District installed five new 5/8-inch x 3/4-inch meter connections to its distribution system using touch-read meters. Farmdale District reported the cost of these installations as an expense in its books of original entry at the time they were constructed, but made an adjusting entry at the end of the accounting period to

reclassify the estimated cost of the installations to Plant In Service in the amount of \$3,885. When making this adjustment, Farmdale District reduced Materials and Supplies Expense by the full amount of the adjustment. It did not reduce test-year wages expense or transportation and equipment expense.

Staff agrees that the cost of the new installations should be capitalized and reported as Plant in Service, but disagrees with the amount capitalized by Farmdale District and Farmdale District's removal of the entire amount from the Materials and Supplies expense account.

As part of its review of Farmdale District's request to adjust its nonrecurring charges, Staff determined that Farmdale District's average cost to construct a new 5/8-inch x 3/4-inch meter installation that is equipped with a radio-read meter is \$1,132. By removing the cost of the radio-read meter, \$233, and by adding the cost of a touch-read meter, \$82.50, Staff estimates that the average cost to construct a test-year connection was \$982. This amount includes \$536 for materials and supplies, \$147 for wages, and \$300 for transportation and equipment costs. By multiplying the average cost by five, Staff estimated that the total test-year installation costs were \$4,913, which consists of material, wage, and transportation and equipment costs of \$2,680, \$733, and \$1,500, respectively. Staff's calculations are detailed below.

	Installation Cost Per Meter	Per Meter Cost x 5
Material Cost for Radio-Read Meters	\$ 686	
Less: Cost of Radio-Read Meter	(233)	
Add: Cost of Touch-Read Meter	<u>83</u>	
Materials Cost for Touch-Read Meter	536	\$ 2,680
Add: Wages	147	733
Transportation and Equipment Cost	<u>300</u>	<u>1,500</u>
Cost to Install Test-Year Meters	<u>\$ 983</u>	<u>\$ 4,913</u>

As shown below, Staff's analysis demonstrates that Farmdale District's year-end adjusting entry to capitalize the cost of new meter installations understates Plant In Service and Materials and Supplies expense by \$1,028 and \$1,205, respectively, and overstates wages expense and transportation and equipment expense by \$733 and \$1,500, respectively.

	Capitalized By Farmdale District	Less: Amount Capitalized by Staff	Difference
Materials and Supplies	\$ 3,885	\$ (2,680)	\$ 1,205
Wages		(733)	(733)
Transportation and Equipment		<u>(1,500)</u>	<u>(1,500)</u>
Total Removed from Expenses and Capitalized as Plant in Service	<u>\$ 3,885</u>	<u>\$ (4,913)</u>	<u>\$ (1,028)</u>

Staff corrected the test-year amounts reported by Farmdale District by increasing Materials and Supplies expense by \$1,205 and decreasing Wages-Employees and Transportation Expense by \$733 and \$1,500, respectively. Also, Staff increased

Farmdale District's depreciable basis for Meters and Installations by \$1,028. This increased test-year depreciation by \$23.¹⁵

(G) Increase to Wholesale Water Rate. Farmdale District purchases wholesale water from the Frankfort Plant Board ("Frankfort"). Subsequent to the test year, Frankfort increased the wholesale rate charged to Farmdale District. Frankfort's current rate, including the Kentucky River Authority water withdrawal fee, is \$2.21 per thousand gallons. Staff increased Farmdale District's test-year purchased water expense by \$46,100 to account for the current rate in pro forma operations.¹⁶

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Additional Capital Costs Identified by Staff	\$ 1,028
Divide by: 45 Year Life	<u>45</u>
Increase to Test-Year Depreciation Expense	<u>\$ 23</u>

16

Test-Year Gallons Purchased (000's Omitted)	202,773
Rate Per Thousand Gallons	<u>\$ 2.21</u>
Pro Forma Purchased Water	448,128
Less: Test Year	<u>(402,028)</u>
Increase	<u>\$ 46,100</u>

(H) Water Loss. Using information provided by Farmdale District, Staff calculated Farmdale District's test-year water loss to be 21.10 percent,¹⁷ or 6.10 percent above the 15 percent allowed for ratemaking purposes by 807 KAR 5:066, Section 6(3). As calculated below, Staff removed the cost to purchase and pump water loss that was above the allowable limit.

	Test Year	Increase Due to Wholesale Rate Change	Adjusted Balance	Times: Excess Water Loss Percentage	Decrease
Purchased Water	\$ 402,028	\$ 46,100	\$ 448,128	6.10%	\$ (27,336)
Purchased Power	23,809		23,809	6.10%	(1,452)

(I) Contractual Services – Legal. Legal fees of \$11,618 were included in Farmdale District's test-year expenses that were incurred to construct the waterworks improvement project that was approved by the Commission in Case No. 2012-00178.¹⁸ The USoA requires that these fees be capitalized as a component of Utility Plant in Service and depreciated over the asset's useful life.¹⁹ Accordingly, Staff removed this amount from test-year operating expenses, added it to test-year Utility Plant in Service,

¹⁷

Water Purchased	202,772,500
Less: Water Sold	(159,901,188)
Water Used for Flushing	(81,000)
Fire Department Use	(15,400)
	<hr/>
Water Loss	42,774,912
Water Loss Percentage	<hr/> <hr/> 21.10%

¹⁸ Case No. 2012-00178, *Application of the Farmdale Water District for a Certificate of Public Convenience and Necessity to Construct, Finance, and Increase Rates Pursuant to KRS 278.023*. (Ky. PSC June 12, 2012).

¹⁹ USoA for Class A/B Water Districts and Associations, Accounting Instruction 19, pages 20-22.

and adjusted test-year depreciation expense to include the depreciation that will accrue on these assets.

(J) Bad Debt Expense. During the test year, Farmdale District reported \$7,541 for Bad Debt Expense. This amount included \$4,649 to write off sewer accounts receivable that were recognized by Farmdale District as part of its contracted sewer billing and collection service. The write-off of sewer accounts receivables is not an expense to Farmdale District and should not be reported on its Income Statement. Staff removed the sewer account write-offs from Farmdale District's test-year operations.

(K) Miscellaneous Expense – Fines. During the test year, Farmdale District was fined \$5,000 by the Division of Water ("DOW") for untimely filing reports and for providing an inadequate number of water samples. It is Staff's opinion that a penalty paid for violating a statute or regulation should not be included in the calculation of Farmdale District's revenue requirements. Staff removed the \$5,000 DOW penalty from Farmdale District's test-year operations.

(L) Depreciation. Farmdale District reported \$59,909 for test-year depreciation expense. It proposed to increase this amount by \$48,340 to account for depreciation that will accrue on the \$3,570,000 waterworks improvement project that was approved by Commission Order in Case No. 2012-00178.²⁰ Staff determined that Farmdale District's test-year depreciation should be increased by \$132,375 as summarized below.

²⁰ In its Order, the Commission stated the project's cost at \$3,570,000, the amount estimated by Farmdale District in its application. In this proceeding, Staff determined the project's final cost to be \$3,492,012.

Add Depreciation on Meters and Meter Installations Capitalized by Staff, See Ref. Item (F)	\$ 23
Add Depreciation on Post-Test-Year Plant Additions	142,965
Remove Depreciation on Assets Taken Out of Service	(6,219)
Decrease Due to Change in Depreciable Lives	<u>(4,394)</u>
Net Increase	<u>\$ 132,375</u>

Post-Test-Year Plant Additions. The project approved by the Commission in Case No. 2012-00178 included the replacement of: 1) existing water mains; 2) an elevated storage tank; 3), a booster pump station, and 4) all existing meters that are used to measure the quantity of water delivered to customers. The project also included the installation of a supervisory control and data acquisition system (“SCADA”). The project was completed and became operational in March 2013. Since the project is in service and operational, Staff finds that annual depreciation to be accrued on the project should be included in the calculation of Farmdale District’s revenue requirements in this proceeding.

While the replacement project was complete at the time of Staff’s field work in this proceeding, Farmdale District had not recorded the cost of the new assets or removed the cost of the retired assets from its books. Farmdale District will determine the exact amount of the transactions to be recorded as part of its 2013 annual audit. For the purpose of this report, Staff estimated the impact that these transactions will have on Farmdale District’s test-year operations. As calculated and explained below,

Staff determined that the replacement project and the SCADA system will increase test-year depreciation expense by \$142,965.²¹

Account Group	Final Construction Costs	Plus: Undeprciated		Divide by: Useful Life	Pro Forma Depreciation
		Balance of Retired Property	Depreciable Basis of New Asset		
Land and Rights	\$ 5,645		\$ 5,645		
Distribution Mains	972,852	\$ 46,126	1,018,978	50	\$ 20,380
Pumping Station	276,553		276,553	20	13,828
Elevated Water Storage Tank	1,062,184		1,062,184	40	26,555
SCADA System	92,887		92,887	10	9,289
Automated Meter Reading System	1,081,891	11,798	1,093,689	15	72,913
Total	\$ 3,492,012	\$ 57,923	\$ 3,549,935		\$ 142,965

The \$3,492,653 final construction cost includes \$3,093,613²² incurred for materials and contract labor necessary to construct the assets and \$398,395²³ for construction overhead costs, i.e., engineering fees, legal fees, administrative fees, and interest costs necessary to bring the assets into service. As shown below, Staff allocated the overhead charges to each account group based on the weighted average of the material and contract labor costs charged to each group.

²¹ Staff also included principal and interest payments on the debt used to finance a portion of the project's costs in Farmdale District's average annual debt service requirement. No adjustments to other test-year revenues or expenses are required. Since no new customers were added to the system through the project, no other test-year revenues or costs will change by a material amount.

²² The material and contract labor costs are the amounts of the final contract bid awards. These costs were provided to Staff by the project's design engineer.

²³ The construction overhead costs shown by Staff are the estimates made by Farmdale District in Case No. 2012-00178. Based on discussions with Farmdale District representatives, Staff determined that the actual construction overhead charges were not materially different from the estimated amounts. Staff did not compile the actual overhead costs from Farmdale District's records.

Account Group	Materials and Contract Labor	Weighted Average	Allocation of Construction Overheads	Final Construction Costs
Land and Rights	\$ 5,000	0.162%	\$ 645	\$ 5,645
Distribution Mains	861,863	27.859%	110,989	972,852
Pumping Station	245,000	7.920%	31,553	276,553
Elevated Water Storage Tank	941,000	30.418%	121,184	1,062,184
SCADA System	82,290	2.660%	10,597	92,887
Automated Meter Reading System	958,460	30.982%	123,431	1,081,891
Total	<u>\$ 3,093,613</u>	<u>100.00%</u>	<u>\$ 398,395</u>	<u>\$ 3,492,012</u>

Staff added the undepreciated balance of the retired mains and meters in the amounts of \$46,126²⁴ and \$11,658,²⁵ respectively, to the replacement assets' original

²⁴ Through the main replacement project, Farmdale District replaced 5 miles, or 31.25 percent, of the 16 miles of asbestos cement main that were originally constructed in 1968, as well as 3 miles, or 9.38 percent, of the 32 miles of polyvinyl chloride main that was constructed in 1977.

	Vintage	
	1968	1977
Miles of Main Removed From Service	5	3
Divide by: Total Miles	16	32
Percentage Removed	31.25%	9.38%

As shown below, Staff determined the total undepreciated balance of the retired mains to be \$46,126 (\$37,917 + \$8,209) by applying the percentages calculated above to the net book balance of all main reported for each vintage at the end of the test year.

	Vintage	
	1968	1977
Original Cost of all Main for Vintage	\$ 586,550	\$ 312,724
Less: Accumulated Depreciation for Vintage	465,217	225,161
Undepreciated Balance as of December 31, 2012	121,333	87,563
Times: Percentage of Miles Removed from Service	31.25%	9.38%
Undepreciated Balance of Main Removed from Service	\$ 37,917	\$ 8,209

²⁵ Farmdale District replaced all touch-read meters with radio-read meters as part of the construction project. The original cost of the touch-read meters as of December 31, 2012, along with their installation costs, i.e., labor, supplies, and equipment, was reported at \$497,479 to account 334, Meters and Meter Installations, as shown on page 14 of Farmdale District's 2012 Annual Report. At Reference Item (F) of this report, Staff increased this amount by \$1,028, restating the account's balance to \$498,507.

The original cost of the retired touch-read meters must be identified and removed from Account 334. Because Farmdale District's property records are not maintained in a manner that allows for the separation of the meters' cost from their installation cost, Staff estimated the meters' cost to be \$69,706 by multiplying the balance of account 334 by 13.983 percent, the percentage of the cost of a 5/8-inch x 3/4-inch touch-read meter, \$82.50, to the total meter connection charge, \$590, that was approved by the Commission in 1992 as the average cost of a meter and meter installation. While the touch-read meters that were removed from service include a very small number of 1-inch meters, the vast majority were 5/8-inch x 3/4-inch meters. Therefore, Staff's estimate fairly represents, in all material respects, the cost of the retired meters.

As shown on page 15 of Farmdale District's 2012 Annual Report, depreciation accumulated on account 334 as of December 31, 2012, totaled \$414,109. At Reference Item (F), Staff increased this amount by \$23, restating the account balance to \$414,132. Staff multiplied the restated balance by 13.983 percent to estimate that \$57,908 of depreciation had accumulated on the cost of the touch-read meters. The undepreciated balance of the touch-read meters is estimated to be \$11,798 (\$69,706, Original Cost - \$57,908, Accumulated Depreciation).

cost to determine their depreciable basis. This method represents a departure from the accounting principles of regulated utilities, but is consistent with prior Commission rulings. The USoA adopted by the Commission governs the accounting for Farmdale District's retirement of depreciable assets. It states, in part, that "at the time of retirement of depreciable utility plant in service, this account shall be charged with the book cost of the property retired plus the cost of removal, and shall be credited with the salvage value and any other amounts recovered, such as insurance."²⁶

Under the accounting treatment prescribed by the USoA, gains and losses on the disposition of a depreciable asset are embedded in the accumulated depreciation account. Their effects are recognized in the determination of depreciation rates when the remaining life method of depreciation is used. Gains have the effect of decreasing the composite rate while losses increase the rate; however, gains and losses have no impact in the determination of depreciation rates when the whole life method is used to calculate depreciation. When using the whole life method, gains and losses remain embedded in the accumulated depreciation account with no impact on depreciation rates absent an accounting treatment alternative to that required by the USoA.

The Commission has historically allowed small utilities, such as Farmdale District, which do not maintain property records using the type of sophisticated computer software program necessary to accurately and reliably calculate remaining life depreciation rates and do not have the financial resources to commission a remaining life depreciation study, to calculate depreciation using the whole life method. In this proceeding Farmdale District has proposed the whole life method. Staff agrees that this

²⁶ USoA for Class A/B Water Districts and Associations at 42.

method is appropriate and should be accepted by the Commission, but with its use, the loss on the disposition of a depreciable asset will be carried forward in Farmdale District's property records indefinitely, absent an accounting method that is alternative to that required by the USoA.

Staff's proposed alternative recognizes the loss on the disposition of the retired asset over the life of the replacement assets. The effect of this method is the same as that of other alternative methods of accounting that have been authorized by the Commission for other utilities when the whole life method is used to calculate depreciation.²⁷

Assets Removed from Service. Test-year depreciation expense included depreciation that was accrued on the touch-read meters and mains that were removed from service. Also, as discussed in Ref. Item (F), Staff increased depreciation on Meters and Meter Installations by \$23 to account for the five new meter connections that were installed during the test year using touch-read meters. These meters were also removed from service.

Depreciation expense reported on the assets that were taken out of service should be removed from Farmdale District's pro forma operations. Accordingly, Staff

²⁷ Case No. 2011-00096, *Application of South Kentucky Rural Electric Cooperative Corporation for an Adjustment of Electric Rates* (Ky. PSC Mar. 30, 2012) at 22-25.

reduced depreciation for meters by \$1,967²⁸ and depreciation for mains by \$4,252.²⁹ Staff's total depreciation reduction to account for the retired assets is \$6,219.

Change to Depreciable Lives. Farmdale District calculated test-year depreciation by dividing the plant's original cost by its estimated useful life. A summary of Staff's review of the estimated useful lives used by Farmdale District is found in this report at Attachment B. To account for the effects of the changes to the lives recommended in Attachment B, Staff decreased test-year depreciation by \$4,394 as calculated below.

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Test-Year Depreciation on Meters and Installations	\$ 14,047
Add: Depreciation on the Additional Meter Installation	
Costs Capitalized by Staff, See Ref. Item (F)	<u>23</u>
Total Depreciation on Meters and Installations	14,070
Times: Percentage Assigned to Meters Only, See Footnote 25	<u>13.983%</u>
Annual Depreciation Expense Attributed to Meters	<u><u>\$ 1,967</u></u>

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	<u>Vintage</u>	
	1968	1977
Test-Year Depreciation for Vintage	\$ 11,731	\$ 6,254
Times: Percentage of Main Removed from Service	<u>31.25%</u>	<u>9.38%</u>
Test-Year Depreciation on Assets Removed from Service	<u><u>\$ 3,666</u></u>	<u><u>\$ 586</u></u>

	Depreciable Basis at December 31, 2012	Divide by Useful Life	Pro Forma
Meters and Meter Installations	\$ 204,098		
Less: Basis Assigned to Meters, 13.983 Percent	<u>(28,539)</u>		
Meter Installations	175,559	45	\$ 3,901
Fire Hydrants	8,161	50	163
Transportation Equipment	14,707	7	<u>2,101</u>
Pro Forma			6,165
Less: Test Year			<u>(10,559)</u>
Decrease			<u>\$ (4,394)</u>

(M) Nonutility Income – Tax Refund. In 2011, Farmdale District remitted \$2,549 more for employee Social Security taxes to the Social Security Administration than was required. The overpayment was refunded to Farmdale District in 2012. Upon receipt, the refund amount should have been reported directly to retained earnings to correct the prior period accounting error. Instead, Farmdale District reported the refund as test-year Nonutility Income. Staff removed the amount from test-year operations to correct this error.

Overall Revenue Requirement and Required Revenue Increase

Staff applied the Debt Service Coverage (“DSC”) method as generally accepted by the Commission to calculate Farmdale District’s Overall Revenue Requirement. This method allows for recovery of: 1) cash related pro forma operating expenses; 2) recovery of depreciation expense, a non-cash item, to provide working capital;³⁰ 3) the average annual principal and interest payments on all long-term debts, and 4) working capital that is in addition to depreciation expense. A comparison of Staff’s and Farmdale District’s calculation of its Overall Revenue Requirement and Required Revenue Increase is shown below.

³⁰ The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds to be used for renewing and replacing assets. See *Public Serv. Comm’n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky.1986). Although a water district’s lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account’s balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district’s general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. See Case No. 2012-00309, *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 21, 2012).

	Staff	(Ref.)	Farmdale District
Pro Forma Operating Expenses	\$ 938,245		\$ 1,124,875
Plus: Average Annual Debt Payments:			
Regulated Operations	\$ 93,036		
Non-Regulated Operations	3,879	96,915 (1)	111,375
Additional Working Capital			
Regulated Operations	18,607		
Non-Regulated Operations	776	19,383 (2)	
Overall Revenue Requirement	1,054,543		1,236,250
Less: Other Operating Revenue	(48,466)		(102,440)
Other Income:			(111,548)
Interest Income	(3,333)		
Nonutility Income	(1,670)		
Net Revenue from Contract Work:			
Gross Contract Revenue	(88,015)		
Allocated Expenses	63,151	(24,864)	
Revenue Required From Rates	976,210		1,022,262
Less: Pro Forma Present Rate Service Revenues	(736,363)		(769,236)
Required Revenue Increase	\$ 239,847		\$ 253,026
Percent Increase	32.57%		32.89%

(1) Average Principal and Interest Payments. Farmdale District requested recovery of \$111,375 for principal and interest payments on the RD bonds that were approved by the Commission in Case No. 2012-00178. Farmdale District did not provide a calculation of the payment amount requested.

Interest began accruing on the RD bonds on March 29, 2013, upon Farmdale District's signing of the bonds. The first interest payment occurred on July 1, 2013. Principal payments will begin on January 1, 2015. Because Farmdale District has executed the bonds and has begun making payments, Staff agrees that the RD bond payments represent a known and measurable change to Farmdale District's test-year operations for which ratemaking adjustments should be allowed.

Following the Commission's general practice, Staff included the three-year average of the bond principal and interest payments in the calculation of Farmdale District's Overall Revenue Requirement. Staff calculated the average to be \$96,915 using the annual payments that will begin on January 1, 2015.³¹ Anticipating that a Final Order in the instant case will not likely be issued until August or September of 2014, Staff's use of the average that begins with the January 1, 2015 payment closely matches the average bond payments to the effective date of the rates to be authorized by the Commission in this instance.

In Attachment C, Reference Item (7), the average debt payment is separated between Farmdale District's regulated and non-regulated operations. As previously discussed at Reference Item (C) of this report, in the absence of stockholders, Staff passed the benefits of Farmdale District's non-regulated operations onto its ratepayers. The non-regulated debt payment must also be passed through to ratepayers.

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Calculation of Three-Year Average Debt Payment

Year	Interest	Principal	Annual Debt Payment
2015	\$ 76,151	\$ 21,000	\$ 97,151
2016	75,263	21,500	96,763
2017	74,332	22,500	96,832
Total	225,745	65,000	290,745
Divide by: 3 years	3	3	3
Average	\$ 75,248	\$ 21,667	\$ 96,915

(2) Additional Working Capital. The DSC method, as historically applied by the Commission, includes an allowance for working capital that is in addition to the amount provided through recovery of Depreciation Expense. The additional working capital is set equal to the minimum net revenues required by Farmdale District's lenders that are above its average annual debt payments.

As shown below, Staff calculated Farmdale District's allowance for additional working capital to be \$19,383. Staff included this amount in the calculation of Farmdale District's Overall Revenue Requirement. Farmdale District did not include an allowance for additional working capital in its calculation, recognizing that its inclusion is not necessary to meet its lender's DSC ratio requirements.³²

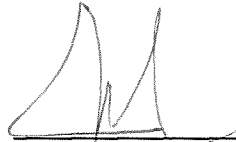
³² The RD bond resolutions require Farmdale District to assess rates for water service that produce net revenues that are equal to at least 120 percent of the average annual bond principal and interest payments. The DSC ratio measures an entity's ability to pay its cash related operating expenses and to pay debt principal and interest. RD calculates the ratio by dividing net revenues by the entity's average annual debt principal and interest payments. Net revenues are equal to total revenues less cash-related expenses. Depreciation expense, a noncash operating expenses, is excluded from the determination of net revenues. As shown below, the required DSC Ratio is met with and without including the additional working capital in Farmdale District's Overall Revenue Requirement.

	With Additional Working Capital	Without Additional Capital
Overall Revenue Requirement	\$ 1,054,543	\$ 1,035,160
Less: Operating and Maintenance Expense	(747,380)	(747,380)
Taxes Other Than Income	(9,497)	(9,497)
	<hr/>	<hr/>
Net Revenues	297,666	278,283
Divided by: Average Annual Debt Payments	96,915	96,915
	<hr/>	<hr/>
DSC Ratio	307%	287%

Average Annual Principal and Interest Payment	\$ 96,915
Times: DSC Coverage Ratio	<u>120%</u>
Required Net Revenues	116,298
Less: Average Annual Principal and Interest Payment	<u>(96,915)</u>
Allowance for Additional Working Capital	<u><u>\$ 19,383</u></u>

The allowance for additional working capital is split between regulated and non-regulated operations in Attachment C at Reference Item (7).

Signatures



 Jack Scott Lawless, CPA
 Manager of Water and Sewer Revenue
 Requirements Branch
 Division of Financial Analysis



 Prepared by: Ariel Turnbull
 Financial Analyst, Water and Sewer
 Revenue Requirements Branch
 Division of Financial Analysis



 Prepared by: Eddie Beavers
 Rate Analyst, Communications, Water
 and Sewer Rate Design Branch
 Division of Financial Analysis

ATTACHMENT A
STAFF REPORT, CASE NO. 2013-00485

Staff proposed rates based upon the
Cost of Service Rates

5/8- x 3/4-Inch Meter

First	2,000	gallons	\$16.30	Minimum bill
Next	3,000	gallons	5.15	per 1,000 gallons
Next	5,000	gallons	4.69	per 1,000 gallons
All Over	10,000	gallons	4.21	per 1,000 gallons

1-Inch Meter

First	5,000	gallons	\$31.75	Minimum bill
Next	5,000	gallons	5.15	per 1,000 gallons
Next	140,000	gallons	4.69	per 1,000 gallons
All Over	150,000	gallons	4.21	per 1,000 gallons

4-Inch Meter

First	50,000	gallons	\$223.60	Minimum bill
Next	50,000	gallons	5.15	per 1,000 gallons
Next	50,000	gallons	4.69	per 1,000 gallons
All Over	150,000	gallons	4.21	per 1,000 gallons

ATTACHMENT B
STAFF REPORT, CASE NO. 2013-00485

FARMDALE WATER DISTRICT
ENGINEERING DIVISION'S
ANALYSIS OF ASSET 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, 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. The table shows the utility's current and Engineering staff's recommended reasonable and appropriate service lives based on a review of information contained in the record of this case.

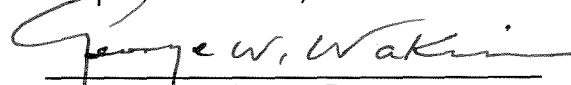
Asset Classification	Current	Staff Recommended	NARUC Study
Group: Autos	5	7	7
Group: Fire Hydrants	20	50	40-60
Group: Meter Installation	20	45	40-50
Group: Meters	10	15	35-45

In its application, the utility requested that its meters be depreciated over a ten-year period. According to NARUC Study, meters are depreciated over an average service life which ranges from 35 to 45 years. The utility's meter service life of ten years

is not consistent with the NARUC Study. Absent any specific historical meter information available by the utility for this new meter technology, the utility provided additional information from the meter manufacturer in order to justify meter service lives outside the range specified by the NARUC Study. In the information provided, 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 non-performing batteries, system flowtube, the flow sensing and data processing assemblies, and the register with hourly reads at no cost for the first ten years, and after at a prorated percentage of the replacement price (of listed elements above) which reaches 100 percent at 20 or more years of service. This information indicates a useful life range of 10-20 years, of which the midpoint of 15 years is reasonable and appropriate.

For the remaining asset groups as shown in the above table, absent any specific and verifiable evidence supporting alternative service lives, Engineering Staff finds that service lives based on the NARUC Study are reasonable and appropriate.

Prepared June 18, 2014



George W. Wakim, P.E.
Manager, Water and Sewer Branch

ATTACHMENT C
STAFF REPORT, CASE NO. 2013-00485

DETERMINATION OF NON-REGULATED
OPERATING COSTS

	Customer Account and Administrative			Meter Reading			Total Allocated
	Amount Subject to Allocation	(Ref.)	33.34% Allocated to Non-Regulated Operations	Amount Subject to Allocation	(Ref.)	12.92% Allocated to Non-Regulated Operations	
Operating Expenses							
Wages - Employees	\$ 79,513	(1)	\$ 26,510	\$ 2,848	(4)	\$ 368	\$ 26,878
Employee Benefits	34,998	(1)	11,668	1,254	(4)	162	11,830
Payroll Taxes	6,083	(1)	2,028	218	(4)	28	2,056
Wages - Commissioners	8,610	(1)	2,871	308	(4)	40	2,911
Transportation			-	539	(5)	70	70
Miscellaneous	25,465	(2)	8,490			-	8,490
Depreciation	2,976	(3)	992	76,814	(6)	9,924	10,916
Total Operating Expenses	157,644		52,559	81,981		10,592	63,151
Debt Service							
Principal				6,713	(7)	867	867
Interest				23,313	(7)	3,012	3,012
Additional Working Capital				6,005	(7)	776	776
Total Debt Service				36,031		4,655	4,655
Total	\$ 157,644		\$ 52,559	\$ 118,012		\$ 15,247	\$ 67,806

Customer Account and Administrative Expenses

Farmdale District supplies water service to 2,609 customers. Of these customers, 1,305 currently receive sewer service from the five sewer utilities to which Farmdale District provides contracted billing and collection services. Farmdale District has two full-time office employees who, under supervision of its General Manager and Commissioners, maintain the customer account information for all water and sewer customers and provide administrative services to all customers. Because the amount of time that the Farmdale District office employees dedicate to water operations and sewer operations is directly related to the number of customers served, it is reasonable to

allocate 33.34 percent of Farmdale District's customer account and administrative costs to non-regulated operations using the percentage of the number of sewer customers served to the total number of customers served.³³

As listed in the table above and explained below, Staff identified \$157,644 in pro forma customer account and administrative expenses for which allocation is necessary. Staff allocated 33.34 percent of these expenses to account 416 using the number of customers allocation factor.

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Name of Sewer Utility	Number of Customers	Percent
Frankfort	387	
Ridgelea	193	
Farmdale Corp	240	
Coolbrook	444	
Evergreen	<u>41</u>	
Number of Sewer Customers	1,305	33.34%
Number of Water Customers	<u>2,609</u>	<u>66.66%</u>
Total Water and Sewer Customers	<u><u>3,914</u></u>	<u><u>100.00%</u></u>

(1) Wages and Wage Overhead Charges. Pro forma customer account and administrative employee wages that were subject to allocation totaled \$79,513. This amount includes 100 percent of the office employees' wages and 25 percent of the General Manager's wages based on his estimated time dedicated to the customer account and administrative duties. As shown below, these wages represent 52.644 percent of the total pro forma wages expensed by Staff for all employees. The same percentage of pro forma employee benefits and payroll taxes for all employees should also be subject to allocation. In addition, since Farmdale District's Commissioners oversee all employees, Staff attributed 52.644 percent of the Commissioner's wages to customer account and administrative duties that must be allocated.

	Pro Forma Expense Prior To Allocation	Portion Subject to Allocation, 52.644% of Pro Forma
Wages - Employees	\$151,039	\$ 79,513
Employee Benefits	66,480	34,998
Payroll Taxes	11,554	6,083
Wages - Commissioners	16,355	8,610

(2) Miscellaneous Expenses. As listed below, Staff identified \$25,465 that was reported as Miscellaneous Expenses that were incurred to operate Farmdale District's office and maintain customer accounts. These expenses must be allocated to account 416.

Office Supplies	\$ 4,717
Office Maintenance	2,301
Telephone	2,358
Office Utilities	3,498
Postage	<u>12,591</u>
Miscellaneous Expenses Subject to Allocation	<u>\$ 25,465</u>

(3) Depreciation Expense. Depreciation Expense in the amount of \$2,976 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. All other sewer utilities that contract with Farmdale District for billing and collection services 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 attachment, Staff identified \$81,981 in pro forma operating expenses and \$36,031 in Debt Service requirements that are related to meter reading. Of these costs, Staff believes that 12.92 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.

(4) Wage and Wage Overhead Charges. Farmdale District representatives stated that Farmdale District required its newest field employee to spend two days per month performing meter readings, which equates to 9.23 percent of his total annual work days (24 annual reading meters days / 260 annual workdays). Based on this information, Staff attributed \$1,728, or 9.23 percent of the employee's \$18,720 annual wage, to meter reading. This amount represents 4.08 percent ($\$1,728 / \$42,339$ total field employee wages) of the two field employees' total wage expense. Also, the General Manager estimated that 75 percent of his time is dedicated to field operations, which include the supervision of meter-reading activities. Staff attributed \$1,120 of the General Manager's annual wage to meter reading, based on the percentage of the field employee's wages attributed to meter reading.³⁴

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General Manager's Annual Wage	\$ 36,612
Times: 75 Percent	<u>75%</u>
General Manager's Wage Attributed to Field Operations	27,459
Times: Percent of Field Wages Attributed to Meter Reading	<u>4.08%</u>
General Manager's Wages Attributed to Meter Reading	<u>\$ 1,120</u>

In total, Staff determined that \$2,848 (\$1,728, Field Employee, + \$1,120, General Manager) of pro forma employee wages expense is attributed to meter reading. As shown below, these wages represent 1.886 percent of the total pro forma employee wages expensed by Staff. The same percentage of employee benefits and payroll taxes should also be allocated as a cost of meter reading. In addition, since Farmdale District's Commissioners oversee all employees, Staff attributed 1.886 percent of the Commissioners' wages to meter reading.

	Pro Forma Expense Prior To Allocation	Portion Subject to Allocation, 1.886% of Pro Forma
Wages - Employees	\$ 151,039	\$ 2,848
Employee Benefits	66,480	1,254
Payroll Taxes	11,554	218
Wages - Commissioners	16,355	308

(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 \$539 by multiplying the Internal Revenue Service's 2012 mileage rate, \$.555, by Farmdale District's estimated annual miles driven to read meters during the 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 (L) of Staff's report, Staff calculated pro forma depreciation on the original cost of Farmdale District's Meter Installations and new Automated Meter Reading System to be \$3,901 and \$72,913, respectively.

(7) Debt Service. Staff's calculation of Farmdale District's Overall Revenue Requirement includes the principal and interest payments on Farmdale District's 2012 RD bonds and the additional working capital allowed on those bonds. The bond proceeds were used by Farmdale District to fund a portion of the \$3,492,012 construction project that is discussed in Reference Item (L). This project included the new Automated Meter Reading System that cost \$1,081,891, or 30.982 percent of the project's total cost. The portion of the bonds that is attributable to the metering system is a water-metering cost that is subject to allocation. As calculated below, the total amount subject to allocation is \$36,031.

	Total	30.982% Attributed to Metering System
Average Annual Principal Payment	\$ 21,667	\$ 6,713
Average Annual Interest Payment	75,248	23,313
Average Annual Payment	96,915	30,026
Allowance for Additional Working Capital	19,383	6,005
Total Debt Requirement	<u>\$ 116,298</u>	<u>\$ 36,031</u>

ATTACHMENT D
STAFF REPORT, CASE NO. 2013-00485

Staff Billing Analysis

Billing Analysis for: Farmdale Water District
Test Period From: January through December 2012

Meter Size	Gallons Sold	Revenue
5/8-Inch	128,245,988	654,303
1-Inch	10,448,700	43,827
4-Inch/Stewart Home	13,887,000	38,233
Totals	152,581,688	736,364

Meter Size:	5/8-Inch						
	USAGE	BILLS	GALLONS	FIRST 2,000	NEXT 3,000	NEXT 5,000	OVER 10,000
FIRST	2,000	7,489	8,145,488	8,145,488			
NEXT	3,000	14,196	48,606,100	28,392,000	20,214,100		
NEXT	5,000	6,695	45,112,700	13,390,000	20,085,000	11,637,700	
OVER	10,000	1,499	26,381,700	2,998,000	4,497,000	7,495,000	11,391,700
TOTAL		29,879	128,245,988	52,925,488	44,796,100	19,132,700	11,391,700

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	29,879	52,925,488	\$13.36	\$399,183.44
NEXT		44,796,100	3.62	\$162,161.88
NEXT		19,132,700	3.12	\$59,694.02
OVER		11,391,700	2.92	\$33,263.76
TOTAL	29,879	128,245,988		\$654,303.11

Meter Size:		1-Inch					
	USAGE	BILLS	GALLONS	FIRST	NEXT	NEXT	OVER
FIRST	7,000	442	1,294,500	7,000 1,294,500	3,000	140,000	150,000
NEXT	3,000	98	805,200	686,000	119,200		
NEXT	140,000	248	6,785,700	1,736,000	744,000	4,305,700	
OVER	150,000	8	1,563,300	56,000	24,000	1,120,000	363,300
TOTAL		796	10,448,700	3,772,500	887,200	5,425,700	363,300

REVENUE BY RATE INCREMENT

	USAGE	BILLS	GALLONS	RATE	REVENUE
FIRST	7,000	796	3,772,500	\$30.46	\$24,246.16
NEXT	3,000		887,200	3.12	2,768.06
NEXT	140,000		5,425,700	2.92	15,843.04
OVER	150,000		363,300	2.67	970.01
TOTAL		796	10,448,700		\$43,827.28

Meter Size:		4-Inch/Stewart Home					
	USAGE	BILLS	GALLONS	FIRST	NEXT	NEXT	OVER
FIRST	7,000	0	0	7,000 0	3,000	140,000	150,000
NEXT	3,000	0	0	0	0		
NEXT	140,000	0	0	0	0	0	
OVER	150,000	24	13,887,000	168,000	72,000	3,360,000	10,287,000
TOTAL		24	13,887,000	168,000	72,000	3,360,000	10,287,000

REVENUE BY RATE INCREMENT

	USAGE	BILLS	GALLONS	RATE	REVENUE
FIRST	7,000	24	168,000	\$30.46	\$731.04
NEXT	3,000		72,000	3.12	224.64
NEXT	140,000		3,360,000	2.92	9,811.20
OVER	150,000		10,287,000	2.67	27,466.29
TOTAL		24	13,887,000		\$38,233.17

ATTACHMENT E
STAFF REPORT, CASE NO. 2013-00485

Staff Cost of Service Study

Allocation of Plant Value				
	Total	Commodity	Demand	Customer
Land & Land Rights	4,806		4,806	
Structures & Improvements	39,235		39,235	
Pumping Equipment	33,229		33,229	
Dist Reservoirs & Standpipes	268,495		268,495	
Transmission & Distribution Mains	1,729,198		1,729,198	
Meters & Meter Installation	497,479			497,479
Hydrants	28,812			28,812
Subtotal	\$2,601,254		\$2,074,963	\$526,291
Allocation Percentages	100%		80%	20%
Office Furniture	\$20,801		\$16,641	\$4,160
Transportation Equipment	33,429		26,743	6,686
Power Operated Equipment	39,821		31,857	7,964
Subtotal	\$94,051		\$75,241	\$18,810
Total	\$2,695,305		\$2,150,204	\$545,101
Percentages	100%		80.0%	20.0%
Allocation Percentages	100%		80%	20%

Source: PSC Annual Report 2012

Allocation of Depreciation				
	Total	Commodity	Demand	Customer
Structures & Improvements	28,437		28,437	
Pumping Equipment	33,229		33,229	
Dist. Reservoirs & Standpipes	239,541		239,541	
Transmission & Distribution Mains	851,263		851,263	
Meters & Meter Installations	414,110			\$414,110
Hydrants	25,277			25,277
Subtotal	\$1,591,857		\$1,152,470	\$439,387
Allocation Percentages	100%		72.4%	27.6%
Office Furniture & Equipment	\$16,365		\$11,848	\$4,517
Transportation Equipment	23,135		16,750	6,385
Power Operated Equipment	34,216		24,772	9,444
Subtotal	\$73,716		\$53,370	\$20,346
Total	\$1,665,573		\$1,205,840	\$459,733
Percentages	100%		72%	28%

Allocation of Operation & Maintenance Expense				
	Total	Commodity	Demand	Customer
Salary	\$120,979		\$39,654	\$81,325
Employee Pension & Benefits	53,121		17,325	35,796
Purchased Water	420,792	\$420,792		
Purchased Power	22,357	\$22,357		
Transport Expense	12,676		\$4,373	\$8,303
Insurance-Vehicle	4,051		\$932	\$3,119
Material & Supplies	22,823		\$16,861	\$5,962
Insurance-Workers Comp	2,968		\$966	\$2,002
Misc Expense	36,206		\$12,491	\$23,715
Bad Debt Expense	2,892			\$2,892
Payroll Taxes	9,231		\$3,010	\$6,221
Subtotal	\$708,096	\$443,149	\$95,612	\$169,335
Less Commodity	(\$443,149)			
Total	\$264,947		\$95,612	\$169,335
Allocation Percentages	100%		36%	64%
Salaries & Wages-Admin	\$3,181		\$1,145	\$2,036
Salaries & Wages-Officers	\$13,444		4,840	8,604
Employee Pension & Benefits	\$1,529		550	979
Contractual Services-Accounting	\$20,585		7,411	13,173
Contractual Services-Water Testing	\$3,247		1,169	2,078
Insurance-Workers Comp	\$89		32	57
Insurance-General Liability	\$6,077		2,188	3,889
Advertising Expense	\$363		131	232
Taxes other than Income - A&G	\$266		96	170
Subtotal	\$48,781		\$17,562	\$31,218
Operating Expenses	\$756,877	\$443,149	\$113,174	\$200,553

Source: Field Review 2014

Allocation of Cost of Service				
	Total	Commodity	Demand	Customer
Operation & Maintenance	\$756,877	\$443,149	\$113,174	\$200,553
Debt Service	96,915		77,532	19,383
Depreciation	181,368		131,310	50,058
Additional Working Capital	19,383		15,506	3,877
General Water Service Cost	1,054,543	\$443,149	\$337,522	\$273,871
Less Other Operating Revenue:				
Other Operating Income	(48,466)			(48,466)
Interest Income	(3,333)			(3,333)
Nonutility Income	(1,670)			(1,670)
Net Revenue from Contract Work	(\$24,864)			(\$24,864)
Revenue Required from Rates	\$976,210	\$443,149	\$337,522	\$195,538

NOTES:

Debt Service has been allocated on a percentage of Plant Value Sheet.

Depreciation has been allocated on a percentage of Depreciation Sheet.

Calculation of Water Rates					
	Total	First 2,000 gallons	Next 3,000 gallons	Next 5,000 gallons	Over 10,000 gallons
Actual Water Sales:					
Thousand Gallons	152,581,688	54,352,188	46,472,100	42,379,000	9,378,400
Percent	100%	35.6%	30.5%	27.8%	6.1%
Weighted Sales for Demand:					
Thousand Gallons	252,182,390	108,704,376	77,608,407	56,491,207	9,378,400
Percent	100%	43.1%	30.8%	22.4%	3.7%
Allocation of Volumetric Costs:					
Commodity	\$443,149	\$157,761	\$135,160	\$123,195	\$27,032
Demand	337,522	145,472	103,957	75,605	12,488
Customer	195,538	195,538			
Total	\$976,209	\$498,771	\$239,117	\$198,800	\$39,520
Number of Bills	30,699				
Cost of Service Rates		\$16.25	\$5.15	\$4.69	\$4.21

Verification of Rates				
	Bills	Gallons	Rate	Revenue
First 2,000 gallons	30,699	54,352,188	\$16.25	498,859
Next 3,000 gallons		46,472,100	5.15	239,331
Next 5,000 gallons		42,379,000	4.69	198,758
Over 10,000 gallons		9,378,400	4.21	39,483
Total Revenue from Water Sales				976,431
Other Operating Revenue:				
Other Operating Income				48,466
Interest Income				3,333
Net Revenue from Contract Work				25,205
Total Operating Revenue	30,699	152,581,688		1,053,435

Comparison of Rates				
Gallon Usage	Current Rates	Cost of Service Rates	Increase	Percentage
1,000	\$13.36	\$16.30	\$2.94	22.0%
2,000	\$13.36	\$16.30	2.94	22.0%
3,000	\$16.98	\$21.45	4.47	26.3%
4,000	20.60	26.60	6.00	29.1%
5,000	24.22	31.75	7.53	31.1%
6,000	27.34	36.44	9.10	33.3%
7,000	30.46	41.13	10.67	35.0%
8,000	33.58	45.82	12.24	36.5%
9,000	36.70	50.51	13.81	37.6%
10,000	39.82	55.20	15.38	38.6%
15,000	54.42	76.25	21.83	40.1%
20,000	69.02	97.30	28.28	41.0%
25,000	83.62	118.35	34.73	41.5%
30,000	98.22	139.40	41.18	41.9%
35,000	112.82	160.45	47.63	42.2%
40,000	127.42	181.50	54.08	42.4%
50,000	156.62	223.60	66.98	42.8%
75,000	229.62	328.85	99.23	43.2%
100,000	302.62	434.10	131.48	43.4%
150,000	448.62	644.60	195.98	43.7%
200,000	594.62	855.10	260.48	43.8%
250,000	740.62	1,065.60	324.98	43.9%
300,000	886.62	1,276.10	389.48	43.9%
350,000	1,032.62	1,486.60	453.98	44.0%
500,000	\$1,470.62	\$2,118.10	647.48	44.0%
750,000	2,200.62	3,170.60	969.98	44.1%

Comparison of Rates		
Block Usage	Current Rates	Proposed rates
First 2,000 gallons	\$13.36	\$16.30
Next 3,000 gallons	3.62	5.15
Next 5,000 gallons	3.12	4.69
Over 10,000 gallons	2.92	4.21

Effect on Customer Average Bill - 5,000 Gallons Usage			
Current Rates	Cost of Service Rates	Amount Increase	% Increase
\$24.22	\$31.75	\$7.53	31.10%

ATTACHMENT F
STAFF REPORT, CASE NO. 2013-00485

Billing Analysis with Cost of Service Rates

**Billing Analysis for: Farmdale Water District
Test Period From: January through December 2012**

Meter Size	Gallons Sold	Revenue
5/8 inch	128,245,988	855,419
1 inch	10,448,700	60,464
4 inch	13,887,000	60,483
Totals	152,581,688	976,366

Meter Size:	5/8-Inch						
	USAGE	BILLS	GALLONS	FIRST 2,000	NEXT 3,000	NEXT 5,000	OVER 10,000
FIRST	2,000	7,489	8,145,488	8,145,488			
NEXT	3,000	14,196	48,606,100	28,392,000	20,214,100		
NEXT	5,000	6,695	45,112,700	13,390,000	20,085,000	11,637,700	
OVER	10,000	1,499	26,381,700	2,998,000	4,497,000	7,495,000	11,391,700
TOTAL		29,879	128,245,988	52,925,488	44,796,100	19,132,700	11,391,700

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	29,879	\$16.30	\$ 487,028
NEXT	3,000		5.15	\$ 230,700
NEXT	5,000		4.69	\$ 89,732
OVER	10,000		4.21	\$ 47,959
TOTAL		29,879		\$ 855,419

Meter Size:		1-Inch					
	USAGE	BILLS	GALLONS	FIRST	NEXT	NEXT	OVER
FIRST	5,000	442	1,294,500	5,000 1,294,500	5,000	140,000	150,000
NEXT	5,000	98	805,200	490,000	315,200		
NEXT	140,000	248	6,785,700	1,240,000	1,240,000	4,305,700	
OVER	150,000	8	1,563,300	40,000	40,000	1,120,000	363,300
TOTAL		796	10,448,700	3,064,500	1,595,200	5,425,700	363,300

REVENUE BY RATE INCREMENT

	USAGE	BILLS	GALLONS	RATE	REVENUE
FIRST	5,000	796	3,064,500	\$31.75	\$ 25,273
NEXT	5,000		1,595,200	5.15	\$ 8,215
NEXT	140,000		5,425,700	4.69	\$ 25,447
OVER	150,000		363,300	4.21	\$ 1,529
TOTAL		796	10,448,700		\$ 60,464

Meter Size:		4-Inch					
	USAGE	BILLS	GALLONS	FIRST	NEXT	NEXT	OVER
FIRST	50,000	0	0	50,000 0	50,000	50,000	150,000
NEXT	50,000	0	0	0	0		
NEXT	50,000	0	0	0	0	0	
OVER	150,000	24	13,887,000	1,200,000	1,200,000	1,200,000	10,287,000
TOTAL		24	13,887,000	1,200,000	1,200,000	1,200,000	10,287,000

REVENUE BY RATE INCREMENT

	USAGE	BILLS	GALLONS	RATE	REVENUE
FIRST	50,000	24	1,200,000	\$223.60	\$ 5,366
NEXT	50,000		1,200,000	5.15	\$ 6,180
NEXT	50,000		1,200,000	4.69	\$ 5,628
OVER	150,000		10,287,000	4.21	\$ 43,308
TOTAL		24	13,887,000		\$ 60,483

Clifford Toles
Chairman
Farmdale Water District
100 Highwood Drive
Frankfort, KENTUCKY 40601