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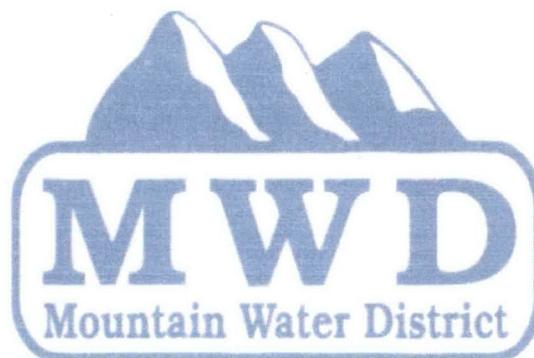


Mountain Water District

Pike County, KY

PSC Clarification Data Request

CASE NO.2014-00342



Case: Mountain Water District
Case No: 2014-00342
RE: PSC Clarification Data Request

Original Response - PSC Third Data Request

Q 1 Refer to Mountain District's response to the Commission Staff's Second Request for Information ("Staff's Second Request"), Item 1. In calendar years 2010 through 2012, Utility Management Group LLC ("UMG") reported "Allocable Corporate Expenses: MWD Project-ADM,"¹ but in calendar years 2013 and 2014, UMG reported a "Corporate Fee: MWD Project-ADM" of \$300,000.

Q 1(a) Provide a detailed explanation as to why UMG changed from allocating corporate expenses to charging a flat fee of \$300,000 to Mountain District.

WITNESS: Meyer

RESPONSE: There are two separate categories of "corporate" expenses charged to projects. Those costs associated with operation of UMG's central or administrative offices in Pikeville, Kentucky are designated as "Corporate Overhead Expenses". Corporate overhead expenses include personnel costs for those individuals working out of the UMG central office located in Pikeville, Kentucky who provide management and administrative support to all projects and direct cost centers. Corporate overhead expenses also include lease expenses for the central office, utilities, general liability and property insurance premiums, professional fees (legal, accounting, IT services, etc.). All of the costs included in Corporate Overhead are indirect expenses that are associated with direct operations of projects.

In addition to the Corporate Overhead Expenses, there is a monthly disbursement made from the UMG general operations account to a separate bank account which is managed by owners of the company. These payments are classified as "Corporate Fees" in the UMG general ledger and are the expenses referred to in question 1 of the PSC's third request for information. The \$300,000 represents a standard payment of \$25,000 per month (for the Mountain Water District project) that is disbursed to that separate bank account. It is used for expenses that are not directly associated with operations (some legal fees, income tax payments, disbursements to owners, etc.). During the calendar years 2010 through 2012, an adjusting entry was made at the end of each year to identify that portion of the \$300,000 corporate fee that was deductible for income tax purposes. Only that portion of the corporate fee that was deductible for income tax purposes was shown on the financial statements as an "Allocable Corporate Expense". Beginning in 2013, those adjustments were not made on UMG's general ledger and the total unadjusted amount of the monthly disbursements made to the separate corporate bank account (\$300,000) is included in the financial statements.

Q 1(b) Provide an itemized list of the costs UMG included in "Allocable Corporate Expenses: MWD Project-ADM."

RESPONSE: An itemized list of costs included in "Allocable Corporate Expenses" is attached as Exhibit 1(b).

Case: Mountain Water District
Case No: 2014-00342
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Clarification Response - PSC Third Data Request

Q 1(a)(b)

WITNESS: Meyer

REVISED RESPONSE:

Corporate Overhead Expenses and Allocation: Corporate overhead expenses are those expenses associated with the operation of the UMG central office located in Pikeville and related to the direct operation, oversight, and administration of projects. These costs vary from year to year. Likewise, contract revenues from all projects vary from year to year. Consequently, since the amount of corporate overhead expenses allocated to various projects is based on the actual amount of corporate overhead expenses incurred as well as the varying amounts of contract revenues for that year, the amount of corporate overhead expense actually allocated to the Mountain Water District project also varies from year to year. A detailed expense statement for corporate overhead expenses (in total) for each of the years 2010 through 2014 is attached as Exhibit 1(a).

Corporate Fee: The corporate fee expense is a separate expense item from the allocated corporate overhead expenses. As indicated previously, it is a standard monthly transfer of funds from the general operating bank account to a separate company account in another bank. For Mountain Water District, this "corporate fee" is \$25,000 per month. Expenses made from those transferred funds include compensation paid to owners, some legal and accounting fees, travel expenses, and licenses and taxes. While the amount of the monthly "Corporate Fee" does not change from month to month, the actual amount of expenses or disbursements made out of those funds does vary from year to year. A detailed list of Allocable Corporate expenses for each of the years 2010 through 2014 was provided in the previous set of responses to PSC questions as Exhibit 1(b).

↑
PSC - 3RD
EXHIBIT 1(b)

EXHIBIT

1 (A)

Overhead Current YTD & Prev YTD
For The 12 Periods Ended 12/31/2014

UTILITY MANAGEMENT GROUP LLC (UMG)

12/31/14 12/31/13
Year to Date Year to Date Prior

Revenue

	Year to Date	Year to Date	Variance	Variance %
Interest Income	224	8,238	-8,014	-97.3
Miscellaneous Income	12,187	36,682	-24,495	-66.8
Total Revenue:	12,411	44,920	-32,509	-72.4
Gross Profit	12,411	44,920	-32,509	-72.4

Expenses

Payroll and Administrative

Salaries & Wages: Regular	230,615	237,641	7,026	3.0
Salaries & Wages: Overtime	8,660	10,024	1,364	13.6
Salaries & Wages: Paid Leave	20,110	22,115	2,005	9.1
FICA Expense	19,000	19,853	853	4.3
FUTA Expense	191	260	69	26.5
SUI Expense	1,490	7,862	6,372	81.0
Health Insurance Expense	53,808	54,314	506	0.9
Life Insurance Expense	4,212	5,045	833	16.5
LTD Expense	1,317	1,333	16	1.2
401K Expense	11,221	10,133	-1,088	-10.7
Employee Awards / Incentives	4,105	3,872	-233	-6.0
Training: Fees and Tuition	2,008	1,135	-873	-76.9
Travel: Transportation	1,299	1,008	-291	-28.9
Travel: Lodging	5,662	9,284	3,622	39.0
Travel: Meals/Entertainment	10,846	9,384	-1,462	-15.6
Travel: Mileage	1,790	1,390	-400	-28.8
Vehicle: Lease Expense	-23,568	5,608	29,176	520.3
Vehicle: Maintenance (Non R&M)	1,619	18,748	17,129	91.4
Vehicle: Gasoline	19,526	19,062	-464	-2.4
Vehicle Loan Interest	2,065	2,236	171	7.6
Vehicle: Miscellaneous	7,705	8,047	342	4.3
Lease Expense	36,000	36,000	0	0.0
Office Rent	0	351	351	100.0
Building Maintenance	25,431	35,911	10,480	29.2
Office Utilities	8,589	8,409	-180	-2.1
Office Equipment: Lease Expense	3,865	6,682	2,817	42.2
Office Equipment: Purchases	0	96	96	100.0
Office Supplies	19,705	22,523	2,818	12.5
Cleaning/Janitorial Expenses	91	569	478	84.0
Postage Expense	3,461	3,772	311	8.2
Freight Charges	410	0	-410	0.0
Professional Fees: Legal	7,349	14,615	7,266	49.7
Professional Fees: Accounting	8,053	18,849	10,796	57.3
Professional Fees: Other	38,086	39,952	1,866	4.7
Insurance: General Liability	146,145	87,165	-58,980	-67.7
Insurance: Automobile	0	35,381	35,381	100.0
Insurance: Workers Compensation	374	-7,778	-8,152	-104.8
Telephone: Offices	6,718	6,282	-436	-6.9
Telephone: Mobile	3,567	5,995	2,428	40.5
Telephone: Other	567	100	-467	-467.0
Security Services	240	240	0	0.0
Total Payroll and Administrative:	692,332	763,468	71,136	9.3

Direct Operations

Safety Supplies	165	0	-165	0.0
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Overhead Current YTD & Prev YTD
For The 12 Periods Ended 12/31/2014

UTILITY MANAGEMENT GROUP LLC (UMG)

	12/31/14	12/31/13 <small>Prior</small>		
	Year to Date	Year to Date	Variance	Variance %
Direct Operations				
(Continued)				
Material/Supplies (Non R&M)	0	100	100	100.0
Total Direct Operations:	165	100	-65	-65.0
Corporate and Other Expenses				
Corporate Overhead	-816,716	-856,253	-39,537	-4.6
Interest Expense	0	158	158	100.0
Bank & Finance Chges	1,714	1,185	-529	-44.6
Depreciation Expense	47,309	41,759	-5,550	-13.3
Dues/Subscriptions	671	5,139	4,468	86.9
Contributions	16,451	16,231	-220	-1.4
Public Relations	409	16,360	15,951	97.5
Sales Tax Expense	18,789	5,907	-12,882	-218.1
Property Tax Expense	4,956	3,639	-1,317	-36.2
Sales Tax Expense	560	0	-560	0.0
Income Tax Expense	18,800	11,835	-6,965	-58.9
Miscellaneous	27,224	21,170	-6,054	-28.6
Total Corporate and Other Expenses:	-679,833	-732,870	-53,037	-7.2
Total Expenses:	12,664	30,698	18,034	58.7
Net Income From Operations:	-253	14,222	-14,475	-101.8
Earnings Before Income Tax:	-253	14,222	-14,475	-101.8
Net Income (Loss):	-253	14,222	-14,475	-101.8

Overhead Current YTD & Prev YTD
For The 12 Periods Ended 12/31/2013

UTILITY MANAGEMENT GROUP LLC (UMG)

12/31/13

12/31/12

	Year to Date	Year to Date	Variance	Variance %
Revenue				
Interest Income	8,238	10,281	-2,043	-19.9
Miscellaneous Income	36,882	2,456	34,226	1,393.6
Total Revenue:	44,920	12,737	32,183	252.7
Expenses				
Gross Profit:	44,920	12,737	32,183	252.7
Payroll and Administrative				
Salaries & Wages: Regular	237,641	209,368	-28,273	-13.5
Salaries & Wages: Overtime	10,024	4,821	-5,203	-107.9
Salaries & Wages: Paid Leave	22,115	16,312	-5,803	-35.6
Salaries & Wages: Bonus	0	2,500	2,500	100.0
FICA Expense	19,853	17,008	-2,845	-16.7
FUTA Expense	260	198	-62	-31.3
SUI Expense	7,862	1,388	-6,474	-466.4
Health Insurance Expense	54,314	38,460	-15,854	-41.2
Life Insurance Expense	5,045	6,918	1,873	27.1
LTD Expense	1,333	1,148	-185	-16.1
401K Expense	10,133	9,160	-973	-10.6
Employee Awards / Incentives	3,872	4,133	261	6.3
Training: Fees and Tuition	1,135	1,278	143	11.2
Travel: Transportation	1,008	396	-612	-154.5
Travel: Lodging	9,284	4,283	-5,001	-116.8
Travel: Meals/Entertainment	9,384	11,500	2,116	18.4
Travel: Mileage	1,390	1,794	404	22.5
Vehicle: Lease Expense	5,608	11,223	5,615	50.0
Vehicle: Maintenance (Non R&M)	18,748	3,055	-15,693	-513.7
Vehicle: Gasoline	19,062	12,775	-6,287	-49.2
Vehicle Loan Interest	2,236	1,664	-572	-34.4
Vehicle: Miscellaneous	8,047	2,425	-5,621	-231.7
Lease Expense	36,000	16,000	-20,000	-125.0
Office Rent	351	5,206	4,855	93.3
Building Maintenance	35,911	4,084	-31,827	-779.3
Office Utilities	8,409	4,296	-4,113	-95.7
Office Equipment: Lease Expense	6,682	4,330	-2,352	-54.3
Office Equipment: Purchases	96	763	667	87.4
Office Supplies	22,523	22,524	1	0.0
Cleaning/Janitorial Expenses	569	251	-318	-126.7
Postage Expense	3,772	3,137	-635	-20.2
Professional Fees: Legal	14,615	19,130	4,515	23.6
Professional Fees: Accounting	18,849	22,722	3,873	17.0
Professional Fees: Other	39,952	33,966	-5,986	-17.5
Insurance: General Liability	87,165	37,162	-50,003	-134.6
Insurance: Automobile	35,381	22,911	-12,470	-54.4
Insurance: Property	0	372	372	100.0
Insurance: Workers Compensation	-7,778	-18,516	-10,738	-58.0
Insurance: Other	0	7,938	7,938	100.0
Telephone: Offices	6,282	10,045	3,763	37.5
Telephone: Mobile	5,995	5,292	-703	-13.3
Telephone: Other	100	1,978	1,878	94.9
Security Services	240	0	-240	0.0
Total Payroll and Administrative:	763,468	565,429	-198,039	-35.0

Overhead Current YTD & Prev YTD
For The 12 Periods Ended 12/31/2013

UTILITY MANAGEMENT GROUP LLC (UMG)

	12/31/13	12/31/12		
	Year to Date	Year to Date	Variance	Variance %
Direct Operations				
Material/Supplies (Non R&M)	100	836	736	88.0
Total Direct Operations:	100	836	736	88.0
Corporate and Other Expenses				
Corporate Overhead	-856,253	-663,391	192,862	29.1
Interest Expense	158	0	-158	0.0
Bank & Finance Chges	1,185	1,277	92	7.2
Depreciation Expense	41,759	26,552	-15,207	-57.3
Dues/Subscriptions	5,139	2,372	-2,767	-116.7
Contributions	16,231	19,531	3,300	16.9
Public Relations	16,360	12,984	-3,376	-26.0
Licenses/Permits	0	10	10	100.0
Sales Tax Expense	5,907	8,176	2,269	27.8
Property Tax Expense	3,639	4,124	485	11.8
Income Tax Expense	11,835	12,045	210	1.7
Miscellaneous	21,170	18,445	-2,725	-14.8
Total Corporate and Other Expenses:	-732,870	-557,875	174,995	31.4
Total Expenses:	30,698	8,390	-22,308	-265.9
Net Income From Operations:	14,222	4,347	9,875	227.2
Earnings Before Income Tax:	14,222	4,347	9,875	227.2
Net Income (Loss):	14,222	4,347	9,875	227.2

Overhead Current YTD & Prev YTD
For The 12 Periods Ended 12/31/2011

UTILITY MANAGEMENT GROUP LLC (UMG)

	12/31/11	12/31/10		
	Year to Date	Year to Date	Variance	Variance %
Revenue				
Interest Income	621	7,563	-6,942	-91.8
Miscellaneous Income	16,147	7,871	8,276	105.1
Total Revenue:	16,768	15,434	1,334	8.6
Gross Profit	16,768	15,434	1,334	8.6
Expenses				
Payroll and Administrative				
Salaries & Wages: Regular	226,393	188,725	-37,668	-20.0
Salaries & Wages: Overtime	1,854	619	-1,235	-199.5
Salaries & Wages: Paid Leave	23,383	21,864	-1,519	-6.9
FICA Expense	18,707	15,809	-2,898	-18.3
FUTA Expense	318	207	-111	-53.6
SUI Expense	1,649	1,356	-293	-21.6
Health Insurance Expense	27,947	56,417	28,470	50.5
Life Insurance Expense	5,417	5,210	-207	-4.0
LTD Expense	727	970	243	25.1
401K Expense	10,136	5,425	-4,711	-86.8
Employee Awards / Incentives	20,342	16,283	-4,059	-24.9
Other Fringe Benefits Expense	10,179	0	-10,179	0.0
Training: Fees and Tuition	794	776	-18	-2.3
Travel: Transportation	350	2,102	1,752	83.3
Travel: Lodging	1,659	4,480	2,821	63.0
Travel: Meals/Entertainment	7,121	12,300	5,179	42.1
Travel: Mileage	582	-65	-647	-995.4
Vehicle: Lease Expense	10,471	8,571	-1,900	-22.2
Vehicle: Maintenance (Non R&M)	6,557	2,918	-3,639	-124.7
Vehicle: Gasoline	7,286	5,117	-2,169	-42.4
Vehicle: Miscellaneous	2,442	4,702	2,260	48.1
Office Rent	3,268	3,500	232	6.6
Building Maintenance	811	8,554	7,743	90.5
Office Utilities	1,556	1,622	66	4.1
Office Equipment: Lease Expense	3,828	2,816	-1,012	-35.9
Office Equipment: Purchases	1,494	1,782	288	16.2
Office Supplies	15,180	11,452	-3,728	-32.6
Cleaning/Janitorial Expenses	212	199	-13	-6.5
Postage Expense	2,946	1,995	-951	-47.7
Professional Fees: Legal	15,320	6,918	-8,402	-121.5
Professional Fees: Accounting	13,789	14,963	1,174	7.8
Professional Fees: Other	45,658	24,175	-21,483	-88.9
Insurance: General Liability	69,403	51,891	-17,512	-33.7
Insurance: Automobile	4,925	4,515	-410	-9.1
Insurance: Workers Compensation	25,090	627	-24,463	-3,901.6
Insurance: Other	0	676	676	100.0
Telephone: Offices	9,557	8,820	-737	-8.4
Telephone: Mobile	4,407	4,204	-203	-4.8
Telephone: Other	180	0	-180	0.0
Total Payroll and Administrative:	601,938	502,495	-99,443	-19.8
Direct Operations				
Material/Supplies (Non R&M)	379	0	-379	0.0
Total Direct Operations:	379	0	-379	0.0

Overhead Current YTD & Prev YTD
 For The 12 Periods Ended 12/31/2011

UTILITY MANAGEMENT GROUP LLC (UMG)

	12/31/11 Year to Date	12/31/10 Prior Year to Date	Variance	Variance %
Corporate and Other Expenses				
Corporate Overhead	-659,681	-573,685	85,996	15.0
Interest Expense	72	15	-57	-380.0
Bank & Finance Chges	999	559	-440	-78.7
Depreciation Expense	13,127	17,973	4,846	27.0
Dues/Subscriptions	1,819	1,681	-138	-8.2
Contributions	7,661	8,813	1,152	13.1
Public Relations	30,533	43,214	12,681	29.3
Property Tax Expense	3,059	2,666	-393	-14.7
Income Tax Expense	3,048	2,238	-810	-36.2
Miscellaneous	13,704	7,345	-6,359	-86.6
Total Corporate and Other Expenses:	-585,659	-489,181	96,478	19.7
Total Expenses:	16,658	13,314	-3,344	-25.1
Net Income From Operations:	110	2,120	-2,010	-94.8
Earnings Before Income Tax:	110	2,120	-2,010	-94.8
Net Income (Loss):	110	2,120	-2,010	-94.8

CASE: Mountain Water District
CASE NO: 2014-00342
RE: PSC Third Request

EXHIBIT 1 (b)

Corporate Expenses Paid
Utility Management Group, LLC
06/30/2014

	<u>Mountain</u> <u>Water District</u>
Corporate Management Fees from Project	150,000.00
Expenses:	
Payroll - Management Team	32,000.00
Licenses and Taxes	51.42
Meals and Entertainment	319.94
Travel	1,499.17
Office Supplies	2,893.98
Repairs	813.96
Fuel	<u>10,497.88</u>
Total Corporate Expenses	<u>48,076.35</u>
Distribution to Owners to Pay Income Taxes and Amounts Retained by Corporate for Contengencies	<u><u>101,923.65</u></u>

Corporate Expenses Paid
Utility Management Group, LLC
12/31/2013

	<u>Mountain</u> <u>Water District</u>
Corporate Management Fees from Project	300,000.00
Expenses:	
Payroll - Management Team	87,500.00
Licenses and Taxes	296.82
Kentucky LLET Tax assessments	50,810.25
Legal Fees	592.25
Accounting Fees	7,140.00
Meals and Entertainment	6,606.86
Travel	5,250.21
Office Supplies	2,287.24
Repairs	693.47
Fuel	26,302.48
Total Corporate Expenses	<u>187,479.58</u>
Distribution to Owners to Pay Income Taxes and Amounts Retained by Corporate for Contingencies	<u><u>112,520.42</u></u>

Corporate Expenses Paid
Utility Management Group, LLC
12/31/2012

	<u>Mountain</u> <u>Water District</u>
Corporate Management Fees from Project	300,000.00
Expenses:	
Payroll - Management Team	60,000.00
Licenses and Taxes	1,728.27
Legal Fees	6,925.68
Accounting Fees	8,500.00
Interest Expense	59.95
Meals and Entertainment	6,179.61
Travel	3,710.47
Office Supplies	1,391.17
Repairs	1,279.82
Fuel	27,306.70
Total Corporate Expenses	<u>117,081.67</u>
Distribution to Owners to Pay Income Taxes and Amounts Retained by Corporate for Contingencies	<u><u>182,918.33</u></u>

Corporate Expenses Paid
Utility Management Group, LLC
12/31/2011

	<u>Mountain</u> <u>Water District</u>
Corporate Management Fees from Project	300,000.00
Expenses:	
Payroll - Management Team	60,000.00
Licenses and Taxes	860.00
Legal Fees	733.88
Accounting Fees	5,900.00
Meals and Entertainment	5,332.92
Travel	4,068.18
Office Supplies	310.77
Fuel	12,435.89
Total Corporate Expenses	<u>89,641.64</u>
Distribution to Owners to Pay Income Taxes and Amounts Retained by Corporate for Contengencies	<u><u>210,358.36</u></u>

Corporate Expenses Paid
Utility Management Group, LLC
12/31/2010

	<u>Mountain</u> <u>Water District</u>
Corporate Management Fees from Project	300,000.00
Expenses:	
Payroll - Management Team	60,000.00
Office Supplies	180.00
Fuel	<u>1,131.02</u>
Total Corporate Expenses	<u>61,311.02</u>
Distribution to Owners to Pay Income Taxes and Amounts Retained by Corporate for Contengencies	<u><u>238,688.98</u></u>

Original Response – PSC Third Data Request

Q 4 The expenses listed below were taken from the "Administrative Department (Shared Costs)" schedule for July 1, 2013 to June 30, 2014, which Mountain District provided in its response to Staff's Second Request, Item 2. Provide detailed work papers showing the calculation of each expense amount. These work papers³ should list and describe all expenses separately that are included in each account, the calculation of the factors used to make allocations to Mountain District, and a statement of why the allocation factors are appropriate.

Q 4(a) Corporate Overhead \$467,927

WITNESS: Meyer

RESPONSE: Corporate Overhead expenses: A detailed schedule of corporate overhead expenses for the test year is attached as Exhibit 4(a). These costs represent the total amount of overhead expenses (not just Mountain Water District's portion). As stated previously in this rate application, these corporate overhead expenses are then allocated to individual projects based on the contract amount for each individual project in relation to the total amount of contract fees for all projects.

Q 4(b) Corporate Fee \$300,000

WITNESS: Meyer

RESPONSE: The Corporate Fee represents \$25,000 per month that is disbursed from the UMG general operating account to a separate UMG account maintained at a separate bank. It is used for expenses that are not directly associated with operations (some legal fees, income tax payments, disbursements to owners, etc.). A detailed schedule of expenditures is not available.

Q 4(c) Depreciation Expense \$29,033

WITNESS: Meyer

RESPONSE: Depreciation Expense represents annual depreciation on those fixed assets owned by UMG that are assigned full time to the Mountain Water District project. Depreciation schedules for calendar year 2013 and calendar year 2014 are attached as Exhibit 4(c).

Q 4(d) Amortization Expense \$117,636

WITNESS: Meyer

RESPONSE: Amortization expense: In April 2009, Mountain Water District and UMG executed a contract amendment. In part, that amendment stipulated that UMG would lend the District \$500,000. The loan amendment also stipulated that repayment of this loan would be forgiven over a period of five years. The \$117,536 of amortization expense reported for the test year represented that portion of the loan (plus imputed interest) was forgiven for that period of time. This expense was classified as amortization expense for the Mountain Water District Project.

Case: Mountain Water District
Case No: 2014-00342
RE: PSC Clarification Data Request

Clarification Response – PSC Third Data Request

Q 4(a)

REVISED RESPONSE:

Detailed statements of aggregate corporate overhead expenses for the calendar years 2010 through 2014 are attached as Revised Exhibit 4(a) and please refer to Exhibit 1(b). These statements reflect the total amount of corporate overhead expenses incurred for each of those years. As indicated previously, the total amount of corporate expenses incurred are then allocated to individual projects and direct cost centers by formula, as follows:

Of the total overhead expenditures incurred for a given period, 5% of that total is allocated to AMG (a separate division of UMG related to heating and cooling system installations and maintenance). Another 5% of the total overhead expenses are allocated to Small Engine Solutions. Small Engine Solutions is a separate division of UMG that repairs, services, and sells equipment (mowers, chain saws, generators, weed eaters, etc.). That leaves 90% of the total overhead expenses to be allocated to UMG's various contracted utility projects. That 90% is allocated to individual projects based on the annual contract amount for each individual project (or utility) divided by the total amount of all annual contract fees. Refer to the attached overhead allocation spreadsheet for December 2014 for an illustration of this allocation formula.

It should be noted that the number of projects utilized in this allocation process will vary from time to time, as the number of utilities under contract with UMG varies. There are several utilities to which UMG provided contract management services in the past that it no longer has contracts with. Likewise, UMG just recently commenced a short term contract with Perry County to manage water and sewer systems previously owned by the City of Vicco and recently transferred to the Perry County Fiscal Court. As this contract was initiated in March 2015, a portion of UMG's corporate overhead expenses will be allocated to that project beginning with the month of March 2015.

EXHIBIT

4 (A)

UMG-Adjusting Journal Entries - OH Alloc

Dec-14

PROJECT OR DIVISION	PROJECT ANNUAL BUDGETS	% OF TOTAL PROJECT BUDGETS	% Allocation To Business Areas	% Allocation for Each Project	Current Allocation Amounts
MOUNTAIN WATER DISTRICT	\$7,680,850	63.85%		57.47%	\$35,817.53
PIKEVILLE PROJECT	\$4,190,021	34.83%		31.35%	\$19,539.01
DICKENSON COUNTY PROJECT	\$158,016	1.31%		1.18%	\$736.86
TROUBLESOME CREEK PROJECT	\$0	0.00%		0.00%	\$0.00
TOTAL PROJECTS	\$12,028,887	100.00%	90.00%	90.00%	
SMALL ENGINE SOLUTIONS (SES)			5.00%	5.00%	\$3,116.30
AMG			5.00%	5.00%	\$3,116.30
TOTAL OVERHEAD ALLOCATION			100.00%	100.00%	\$62,326.00

OVERHEAD ALLOCATION JOURNAL ENTRY		Debit Amount	Credit Amount
Allocated Overhead	8010-98-000		\$62,326.00
Mountain Water District Overhead	8010-01-ADM	\$35,817.53	
Pikeville Overhead	8010-02-ADM	\$19,539.01	
Dickenson County Overhead	8010-05-000	\$736.86	
AMG Overhead Expense	8010-70-000	\$3,116.30	
Small Engine Solutions	8010-00-000	\$3,116.30	

Case: Mountain Water District
Case No: 2014-00342
RE: PSC Clarification Request

Original Response – PSC Third Data Request

Q 5 Refer to Mountain District's response to Staffs Second Request, Item 6. Using the format attached to this request for information as Schedule 1, provide the UMG employee information as originally requested.

WITNESS: Meyer

RESPONSE: A spreadsheet identifying individual positions, pay rates, regular hours and overtime hours for 2013 and 2014 is attached. Please note that UMG has already provided detailed salary and benefit information for Mountain Water District employees and central office (shared) employees for seven years in a different format. On the detailed payroll information provided previously, each of the UMG employees that works 100% of the time for the Mountain Water project are identified by the name of their position. Those employees listed at the end of that payroll report are all central office employees (department 98) and are also listed individually by position. Providing the level of detail requested for 10 years in a different format would be extremely time consuming and overly burdensome and is not available at this time.

Clarification Response – PSC Third Data Request

Q 5

REVISED RESPONSE:

UMG provided a schedule of wage & salary amounts in a similar format with the last set of responses for the years 2013 and 2014. Similar information associated with employees at the beginning of 2015 is attached as an excel file (Revised Exhibit 5).

Unknown Q

REVISED RESPONSE:

With regard to the discrepancy between one salary amount being reported at \$90,000 per year and the total gross payroll amount for that same employee being \$91,730, UMG changed its payroll cycle at the end of 2014. It changed pay dates so that all UMG employees were being paid during the same week (previously everyone was paid on a bi-weekly basis but some employees were paid in one week and the balance of employees were paid the following week. This made payroll processing more efficient. During that process, approximately half of UMG employees were paid for a short pay period (one week) and then began receiving bi-weekly pay checks from that point on. This resulted in one additional week of payroll costs being expensed in 2014 for all of those employees who received the one week pay check during that transition period. In the case of the \$90,000 salary amount, one week of gross pay is equal to \$1,730 (40 hours times \$43.26 / hour). As a consequence the actual gross pay recorded for 2014 was \$91,730. It was simply a matter of timing as to when that week's expense was recorded in the books.

EXHIBIT

5

UTILITY MANGEMENT GROUP
Calendar Year 2013

PAYROLL INFORMATION
Mountain Water District and Shared Employees

POSITION		Hourly rate or base pay	RATE	GROSS YEARLY	REG HOURS	OT HOURS
DIRECT PROJECT EMPLOYEES						
11-250	Water Plant Operator	\$10.99	hourly	\$31,588.66	2,170.0	435.0
11-252	Water Plant Operator	\$9.00	hourly	\$2,349.00	258.0	2.0
11-296	Water Plant Operator	\$16.03	hourly	\$41,262.66	2,161.0	255.5
11-578	Water Plant Operator	\$9.00	hourly	\$2,043.00	200.0	18.0
11-608	Water Plant Operator	\$8.84	hourly	\$13,823.58	1,366.0	97.3
11-955	Water Plant Operator	\$25.00	hourly	\$42,525.15	1,708.2	0.0
11-960	Water Plant Operator	\$12.00	hourly	\$30,375.31	2,184.0	210.0
12-128	Utility Worker	\$10.79	hourly	\$28,181.81	2,133.5	284.5
12-149	Leak Detection	\$12.28	hourly	\$29,609.42	2,131.0	115.0
12-156	Mechanic	\$16.86	hourly	\$37,771.08	2,128.5	53.5
12-233	Meters/Inventory/Purchasing	\$13.97	hourly	\$29,646.29	2,079.8	2.5
12-254	Area Manager	\$44,012.80	salary	\$45,307.47	2,080.0	
12-324	Electrical Maintenance Mgr	\$50,107.20	salary	\$51,427.74	2,080.0	
12-349	Utility Worker	\$12.50	hourly	\$40,266.25	2,088.0	314.5
12-352	Maintenance Technician	\$16.42	hourly	\$38,434.27	2,109.0	134.0
12-374	Utility Worker	\$8.51	hourly	\$8,078.56	878.1	47.5
12-471	Utility Worker	\$13.18	hourly	\$29,403.67	2,111.0	66.5
12-534	Area Manager	\$41,454.40	salary	\$42,769.21	2,080.0	
12-576	Area Manager	\$43,555.20	salary	\$44,882.14	2,080.0	
12-597	Area Manager	\$44,137.60	salary	\$45,393.27	2,080.0	
12-730	Leak Detection	\$12.58	hourly	\$29,157.49	2,131.0	109.0
12-737	Area Manager	\$45,427.20	salary	\$46,758.47	2,080.0	
12-810	Utility Worker	\$9.01	hourly	\$13,540.14	1,412.8	52.0
12-814	Area Manager	\$48,609.60	salary	\$49,943.85	2,080.0	
12-821	Utility Worker	\$15.12	hourly	\$33,186.99	2,089.5	46.5
12-828	Utility Worker	\$13.70	hourly	\$45,081.81	2,115.5	345.5
12-865	Utility Worker	\$9.00	hourly	\$360.00	40.0	
12-905	Equipment Operator	\$14.87	hourly	\$32,673.04	2,081.0	52.5
12-912	Operations Manager	\$84,801.60	salary	\$85,981.98	2,080.0	
12-926	Equipment Operator	\$17.67	hourly	\$37,828.08	2,085.5	16.0
12-928	Utility Worker	\$9.15	hourly	\$16,692.05	1,773.4	13.0
12-958	Equipment Operator	\$12.72	hourly	\$3,370.76	2,108.0	158.0
12-965	Maintenance Technician	\$13.68	hourly	\$3,050.87	2,139.5	158.0

UTILITY MANGEMENT GROUP
Calendar Year 2013

PAYROLL INFORMATION
Mountain Water District and Shared Employees

	POSITION	Hourly rate or base pay	RATE	GROSS YEARLY	REG HOURS	OT HOURS
13-100	Wastewater Plant Operator	\$14.96	hourly	\$35,406.02	2,186.0	101.0
13-101	Maintenance Technician	\$8.50	hourly	\$2,652.00	312.0	
13-255	Maintenance Technician	\$9.42	hourly	\$21,494.73	2,103.5	81.0
13-347	Wastewater Plant Operator	\$11.30	hourly	\$24,526.94	2,093.0	18.5
13-569	Area Manager	\$55,868.80	salary	\$57,161.86	2,080.0	
13-779	Wastewater Plant Operator	\$11.29	hourly	\$25,179.09	2,115.0	44.5
13-973	Maintenance Technician	\$12.33	hourly	\$27,161.91	2,098.5	40.0
14-142	Meter Department/Service Supervisor	\$42,224.00	salary	\$42,775.16	2,080.0	
14-240	Cashier	\$12.80	hourly	\$2,392.10	178.0	1.8
14-512	Cashier	\$8.80	hourly	\$15,114.24	1,685.3	6.3
14-515	Customer Service Rep	\$9.38	hourly	\$19,995.89	2,084.8	5.3
14-558	Service Tech	\$11.82	hourly	\$25,221.43	2,090.0	5.5
14-581	Customer Service Rep	\$12.72	hourly	\$27,043.24	2,081.5	9.0
14-634	Service Tech	\$8.70	hourly	\$16,185.19	1,792.0	24.5
14-660	Billing Clerk	\$13.91	hourly	\$29,450.24	2,084.0	3.3
14-695	Customer Service manager	\$39,291.20	salary	\$39,697.79	2,080.0	
14-965	Service Tech	\$13.48	hourly	\$28,832.37	2,085.8	9.3
14-769	Deliquent Billing Clerk	\$12.06	hourly	\$25,687.70	2,082.5	8.8
14-863	Tank maintenance	\$12.78	hourly	\$27,501.80	2,077.0	16.5
14-940	Service Tech	\$12.79	hourly	\$27,290.76	2,084.0	5.0
14-972	Customer Service manager Rep	\$14.20	hourly	\$30,038.35	2,080.5	4.3
15-590	Executive Assistant	\$55,723.20	salary	\$56,127.58	2,080.0	
15-711	Administrative Assistant	\$12.12	hourly	\$25,722.02	2,081.0	5.3
15-744	Executive Assistant	\$53,705.60	salary	\$54,119.44	2,080.0	
15-772	Senior Project Manager	\$90,000.00	salary	\$91,020.44	2,080.0	
1c-145	Maintenance Technician	\$13.60	hourly	\$41,891.91	2,129.0	608.0
1C-943	Maintenance Technician	\$9.44	hourly	\$22,130.25	2,104.5	121.0
Shared Employees						
98-226	HR Specialist	\$16.79	hourly	\$40,167.66	2,144.0	149.3
98-394	IT Tech	\$18.26	hourly	\$41,243.71	2,136.5	67.0
98-464	Safety Director	\$16.12	hourly	\$38,329.00	2,119.5	149.5
98-604	COO	\$90,000.00	salary	\$89,999.86	2,080.0	
98-618	Accounts Payable Clerk	\$15.61	hourly	\$33,992.69	2,100.8	34.0
98-667	Clerk	\$90,000.00	salary	\$89,999.86	2,080.0	
98-831	Administrative Assistant	\$9.00	hourly	\$11,542.55	1,249.0	16.3

**UTILITY MANGEMENT GROUP
Calendar Year 2014**

**PAYROLL INFORMATION
Mountain Water District and Shared Employees**

	POSITION	Hourly rate or base pay	RATE	GROSS YEARLY	REG HOURS	OT HOURS	% Increase 2013 to 2014
11-250	Water Plant Operator	\$11.68	hourly	\$28,998.88	2,224.0	156.0	6.3%
11-296	Water Plant Operator	\$15.75	hourly	\$11,983.40	727.9	22.0	-1.7%
11-578	Water Plant Operator	\$9.40	hourly	\$19,434.74	1,784.9	177.0	4.4%
11-608	Water Plant Operator	\$9.94	hourly	\$23,824.21	2,006.0	234.5	12.4%
11-790	Water Plant Operator	\$9.31	hourly	\$16,020.58	1,563.0	88.0	New Employee
11-907	Water Plant Operator	\$9.00	hourly	\$2,727.00	282.0	14.0	New Employee
11-960	Water Plant Operator	\$12.84	hourly	\$30,528.89	2,210.0	91.0	7.0%
12-128	Utility Worker	\$11.13	hourly	\$29,418.10	2,193.0	284.0	3.2%
12-147	Utility Worker	\$8.50	hourly	\$1,581.00	186.0		New Employee
12-149	Leak Detection	\$12.49	hourly	\$30,299.55	2,191.0	128.5	1.7%
12-156	Mechanic	\$17.11	hourly	\$38,889.07	2,168.5	52.5	1.5%
12-233	Meters/Inventory/Purchasing	\$14.21	hourly	\$30,825.89	2,121.5	11.5	1.7%
12-252	Utility Worker	\$9.28	hourly	\$14,908.08	1,576.5	3.0	3.1%
12-254	Area Manager	\$44,200.00	salary	\$45,591.43	2,080.0		0.0%
12-324	Electrical Maintenance Mgr	\$50,564.80	salary	\$52,041.25	2,080.0		0.9%
12-349	Utility Worker	\$12.82	hourly	\$40,715.99	2,145.5	241.5	2.6%
12-352	Maintenance Technician	\$16.64	hourly	\$39,308.94	2,196.5	94.0	1.3%
12-374	Utility Worker	\$8.51	hourly	\$340.40	40.0		0.0%
12-471	Utility Worker	\$13.37	hourly	\$30,493.30	2,129.0	83.0	1.4%
12-534	Area Manager	\$41,828.80	salary	\$43,198.43	2,080.0		0.9%
12-576	Area Manager	\$44,033.60	salary	\$45,310.90	2,080.0		1.1%
12-597	Area Manager	\$44,553.60	salary	\$45,949.26	2,080.0		0.9%
12-730	Leak Detection	\$12.81	hourly	\$30,253.13	2,161.0	110.5	2.3%
12-737	Area Manager	\$45,905.60	salary	\$47,351.84	2,080.0		1.1%
12-814	Area Manager	\$48,942.40	salary	\$50,441.73	2,080.0		0.7%
12-821	Utility Worker	\$15.37	hourly	\$34,336.13	2,134.0	48.0	1.7%
12-828	Utility Worker	\$14.04	hourly	\$43,131.85	2,136.5	179.0	2.5%
12-865	Utility Worker	\$9.43	hourly	\$21,671.26	2,082.3	126.0	4.8%
12-905	Equipment Operator	\$15.22	hourly	\$33,559.32	2,120.0	43.5	2.4%
12-912	Operations Manager	\$84,801.60	salary	\$86,712.90	2,080.0		0.0%
12-926	Equipment Operator	\$17.93	hourly	\$39,503.64	2,127.0	35.0	1.5%
12-958	Equipment Operator	\$12.96	hourly	\$25,703.26	1,704.5	163.5	1.9%
12-965	Maintenance Technician	\$14.00	hourly	\$33,794.63	2,175.0	139.0	2.3%
13-100	Water Plant Operator	\$15.17	hourly	\$5,888.57	2,220.5	84.5	1.4%
13-101	Maintenance Technician	\$9.05	hourly	\$6,393.19	1,642.4	101.0	6.5%

UTILITY MANGEMENT GROUP
Calendar Year 2014

PAYROLL INFORMATION
Mountain Water District and Shared Employees

	POSITION	Hourly rate or base pay	RATE	GROSS YEARLY	REG HOURS	OT HOURS	% Increase 2013 to 2014
13-255	Maintenance Technician	\$9.87	hourly	\$21,021.44	1,975.1	84.0	4.8%
13-347	Wastewater Plant Operator	\$12.32	hourly	\$27,272.53	2,138.5	23.0	9.0%
13-569	Area Manager	\$56,097.60	salary	\$57,563.35	2,080.0		0.4%
13-779	Wastewater Plant Operator	\$11.56	hourly	\$26,048.14	2,160.0	36.5	2.4%
13-899	Maintenance Technician	\$8.50	hourly	\$3,593.38	399.5	15.5	New Employee
13-973	Maintenance Technician	\$12.57	hourly	\$30,766.93	2,201.0	148.0	1.9%
14-142	Meter Department/Service Supervisor	\$42,723.20	salary	\$43,813.79	2,080.0		1.2%
14-320	Maintenance Technician	\$9.00	hourly	\$12,604.93	1,357.0	17.0	New Employee
14-491	Customer Service Rep	\$8.56	hourly	\$10,616.53	1,214.0	4.3	New Employee
14-512	Cashier	\$9.06	hourly	\$19,638.81	2,115.8	12.5	3.0%
14-515	Customer Service Rep	\$9.75	hourly	\$4,652.61	463.2	3.8	3.9%
14-521	Customer Service Rep	\$8.00	hourly	\$4,763.43	573.3	1.3	New Employee
14-558	Service Tech	\$12.08	hourly	\$26,588.18	2,120.8	33.0	2.2%
14-581	Customer Service Rep	\$12.95	hourly	\$28,260.31	2,126.0	22.0	1.8%
14-634	Service Tech	\$9.17	hourly	\$20,544.36	2,136.5	37.8	5.4%
14-660	Billing Clerk	\$14.20	hourly	\$30,724.13	2,121.3	14.3	2.1%
14-695	Customer Service manager	\$39,582.40	salary	\$8,236.58	428.5		0.7%
14-712	File Clerk	\$8.00	hourly	\$2,990.00	373.8		New Employee
14-965	Service Tech	\$13.71	hourly	\$31,007.58	2,150.5	52.3	1.7%
14-769	Delinquent Billing Clerk	\$12.27	hourly	\$26,920.84	2,148.5	13.3	1.7%
14-781	Customer Service Rep	\$9.00	hourly	\$7,290.47	804.1	4.0	New Employee
14-863	Tank maintenance	\$12.93	hourly	\$12,680.34	951.4	19.5	1.2%
14-940	Service Tech	\$13.04	hourly	\$28,668.07	2,128.5	25.5	2.0%
14-972	Customer Service manager	\$32,177.60	salary	\$33,395.04	2,126.8	10.3	Changed to salaried
15-590	Executive Assistant	\$56,201.60	salary	\$57,618.91	2,080.0		0.9%
15-711	Administrative Assistant	\$12.35	hourly	\$27,269.85	2,136.3	32.0	1.9%
15-744	Executive Assistant	\$54,204.80	salary	\$55,549.09	2,080.0		0.9%
15-772	Senior Project Manager	\$90,000.00	salary	\$93,482.93	2,080.0		0.0%
1c-145	Maintenance Technician	\$13.92	hourly	\$39,145.93	2,209.5	390.0	2.4%
1C-148	Maintenance Technician	\$8.50	hourly	\$3,055.75	347.5	8.0	New Employee
1C-943	Maintenance Technician	\$9.87	hourly	\$3,828.06	335.4	24.0	4.6%
	Shared Employees						
98-226	HR Specialist	\$17.20	hourly	\$39,833.78	2,162.5	90.3	2.4%
98-394	IT	\$18.65	hourly	\$1,531.50	2,175.0	95.3	2.1%
98-464	Safety Director	\$16.43	hourly	\$1,179.52	2,148.0	139.5	1.9%

**UTILITY MANGEMENT GROUP
Calendar Year 2014**

**PAYROLL INFORMATION
Mountain Water District and Shared Employees**

	POSITION	Hourly rate or base pay	RATE	GROSS YEARLY	REG HOURS	OT HOURS	% Increase 2013 to 2014
98-604	COO	\$90,000.00	salary	\$91,730.65	2,080.0		0.0%
98-618	Accounts Payable Clerk	\$15.87	hourly	\$34,869.11	2,141.8	24.5	1.7%
98-667	Controller	\$90,000.00	salary	\$91,730.62	2,080.0		0.0%

**UTILITY MANGEMENT GROUP
As of 3/31/2015**

**PAYROLL INFORMATION
Mountain Water District and Shared Employees**

POSITION		Hourly rate or base pay	RATE	Date of Hire
DIRECT PROJECT EMPLOYEES				
11-250	Water Plant Operator	\$11.99	hourly	2/3/2011
11-251	Water Plant Operator	\$9.00	hourly	4/1/2015
11-608	Water Plant Operator	\$10.50	hourly	11/2/2012
11-907	Water Plant Operator	\$9.75	hourly	10/31/2014
11-960	Water Plant Operator	\$13.30	hourly	7/13/2009
12-128	Utility Worker	\$11.23	hourly	10/5/2009
12-149	Leak Detection	\$12.59	hourly	7/1/2005
12-156	Mechanic	\$17.21	hourly	7/10/2006
12-233	Meters/Inventory/Purchasing	\$14.33	hourly	7/1/2005
12-252	Utility Worker	\$9.50	hourly	3/17/2014
12-254	Area Manager	\$44,388.00	salary	7/1/2005
12-324	Electrical Maintenance Mgr	\$48,261.00	salary	7/1/2005
12-349	Utility Worker	\$13.23	hourly	12/18/2007
12-352	Maintenance Technician	\$16.73	hourly	7/10/2006
12-471	Utility Worker	\$13.44	hourly	10/31/2005
12-534	Area Manager	\$42,123.00	salary	7/1/2005
12-576	Area Manager	\$44,391.00	salary	7/1/2005
12-597	Area Manager	\$44,481.00	salary	7/1/2005
12-730	Leak Detection	\$12.89	hourly	5/15/2006
12-737	Area Manager	\$46,303.00	salary	7/1/2005
12-814	Area Manager	\$49,168.00	salary	7/1/2005
12-821	Utility Worker	\$15.50	hourly	7/1/2005
12-828	Utility Worker	\$14.14	hourly	11/7/2005
12-865	Utility Worker	\$9.67	hourly	12/23/2013
12-905	Equipment Operator	\$15.34	hourly	10/5/2009
12-912	Operations Manager	\$84,800.00	salary	7/1/2005
12-926	Equipment Operator	\$18.03	hourly	7/1/2005
12-958	Equipment Operator	\$13.08	hourly	5/5/2008
12-965	Maintenance Technician	\$14.12	hourly	7/1/2005

UTILITY MANGEMENT GROUP
As of 3/31/2015

PAYROLL INFORMATION
Mountain Water District and Shared Employees

	POSITION	Hourly rate or base pay	RATE
98-394	IT Tech	\$18.82	hourly
98-464	Safety Director	\$16.98	hourly
98-604	COO	\$90,000.00	salary
98-618	Accounts Payable Clerk	\$16.01	hourly
98-667	Controller	\$90,000.00	hourly

Date of Hire
1/30/2011
5/2/2011
5/1/2005
10/2/2006
6/15/2007

Case: Mountain Water District
Case No: 2014-00342
RE: PSC Clarification Data Request

Original Response – PSC Third data Request

Q 6(a) Provide all studies and analysis that UMG has conducted or commissioned on prevailing wages in the Prestonsburg region, or in the state of Kentucky, that shows UMG's employee wages are reasonable and appropriate.

WITNESS: Meyer

RESPONSE: UMG has not conducted nor commissioned a study or analysis of prevailing wages to determine if its wages are reasonable and appropriate.

Q 6(b) If no studies or analysis have been conducted or commissioned, provide documentation showing that UMG's employee wages are reasonable and appropriate.

WITNESS: Meyer

RESPONSE: There is no formal documentation illustrating that UMG's wages are reasonable and appropriate. UMG has relied on the experience of its senior managers and statewide information provided on occasion by the Kentucky Rural Water Association to determine if its wages are reasonable, competitive, and appropriate.

Clarification Response – PSC Third data Request

Q 6(b)

REVISED RESPONSE:

Attached as Exhibit 6(b)(1) is the Kentucky Rural Water Compensation and benefit survey results for 2012. Exhibit 6(b)(2) is a listing of UMG salaries for MWD by type of position. From this data, Exhibit 6(b)(3) compares representative positions for the District, with the Kentucky Rural Water Association survey. This survey provided a minimum and maximum average range, and we have utilized the maximum range for Districts for over 6,000 connections. As you know, MWD has over 17,000 water customers, and geographically, is one of the largest Districts in the state. UMG's compensation ranges are comparable with the salary ranges for systems our size. Overall UMG's salary ranges fell between average and maximum listed in KRWA's survey.

EXHIBIT

6(b)(1)



Kentucky Rural Water Association

Helping water and wastewater utilities help themselves

Memorandum

To: KRWA Member Utilities
From: Andy Lange
Assistant Director
Date: June 27, 2012
Subject: 2012 KRWA Compensation and Benefit Survey Results

Please find enclosed the 2012 KRWA Compensation and Benefit Survey results. We hope that the information compiled from this survey will give you a basis in your effort to provide equitable compensation and benefit packages for your employees.

We received a 35% response to the survey (125 out of 359 utilities) which provides salary and benefit information for over 1221 full-time employees. To ease in the interpretation of this data, we have broken down the information by type of utility (water district, municipality, etc.) and size (by number of connections). For each utility category, salaries are presented on an annualized basis with the minimum, average and maximum salary for each position. The wage information has been annualized using 2080 hours per year for full time employment. Please take into consideration that years of service, geographic location, and sophistication of operation have not been factored into this survey.

Benefit information is presented for each type and size of utility only in respect to whether a utility offers the benefit to its employees.

Thank you for participating in this survey. If you have specific questions concerning compensation and benefit issues, please give us a call and we will try to provide assistance.

Enclosures

All Full Time Positions (Over 6000 Connections)

Position	Count	Annual Salary Range		
		Minimum	Average	Maximum
Asst. Manager/Asst. Superintendent	14	\$35,832.00	\$54,992.64	\$75,259.00
Asst. Office Manager/Asst. City Clerk	6	\$34,320.00	\$38,369.33	\$44,117.00
Bookkeeper	15	\$21,000.00	\$35,686.73	\$45,157.00
Customer Service Rep (CSR)	60	\$16,890.00	\$28,404.42	\$46,114.00
Distribution Supervisor/Foreman	19	\$33,925.00	\$46,341.05	\$61,500.00
Electrician	3	\$29,200.00	\$33,827.33	\$40,000.00
Engineer	6	\$41,538.00	\$59,398.50	\$69,080.00
Equipment Operator	20	\$25,000.00	\$34,375.10	\$50,025.00
Finance Director	12	\$31,668.00	\$54,420.50	\$85,000.00
GIS Specialist	3	\$38,251.00	\$51,577.00	\$65,458.00
Lab	3	\$37,918.00	\$41,870.33	\$48,381.00
Laborer	80	\$17,202.00	\$26,337.68	\$46,051.00
Maintenance Supervisor/Foreman	13	\$40,700.00	\$48,719.77	\$55,735.00
Manager/Superintendent	18	\$50,076.00	\$73,726.22	\$103,334.00
Mechanic	5	\$30,200.00	\$33,358.60	\$36,587.00
Meter Reader	27	\$18,720.00	\$28,471.78	\$48,000.00
Meter Reading Foreman	4	\$32,781.00	\$40,695.00	\$51,813.00
Office Manager/City Clerk	18	\$29,000.00	\$46,441.28	\$69,904.00
Wastewater Collection Operator	17	\$18,720.00	\$26,758.35	\$38,293.00
Wastewater Collection Supervisor	1	\$44,242.00	\$44,242.00	\$44,242.00
Wastewater Plant Operator	24	\$17,160.00	\$27,693.42	\$43,410.00
Wastewater Plant Supt./Foreman	9	\$26,436.00	\$44,142.44	\$56,100.00
Water Distribution Operator	26	\$21,216.00	\$32,770.31	\$49,300.00
Water Plant Operator	38	\$20,800.00	\$32,468.89	\$43,680.00
Water Plant Superintendent/Foreman	19	\$25,195.00	\$47,663.84	\$75,000.00

Employee Benefits Summary 2012 Survey

All Utilities (125)	
Health Insurance	92%
Life Insurance	68%
Retirement	85%
Vacation	97%
Sick Leave	92%
Incentive Pay	17%

Utilities 0 to 2499 Connections (70)	
Health Insurance	87%
Life Insurance	54%
Retirement	76%
Vacation	94%
Sick Leave	89%
Incentive Pay	13%

Utilities 2500 to 5999 Connections (36)	
Health Insurance	97%
Life Insurance	81%
Retirement	94%
Vacation	100%
Sick Leave	97%
Incentive Pay	19%

Large Utilities Over 6000 Connections (19)	
Health Insurance	100%
Life Insurance	95%
Retirement	100%
Vacation	100%
Sick Leave	95%
Incentive Pay	26%

EXHIBIT

6(b)(2)

**UTILITY MANGEMENT GROUP
Calendar Year 2014**

**PAYROLL INFOI TION
Mountain Water District and Shared Employees**

POSITION		Hourly rate or base pay	RATE	GROSS YEARLY	REG HOURS	OT HOURS	% Increase 2013 to 2014
DIRECT PROJECT EMPLOYEES							
11-250	Water Plant Operator	\$11.68	hourly	\$28,998.88	2,224.0	156.0	6.3%
11-296	Water Plant Operator	\$15.75	hourly	\$11,983.40	727.9	22.0	-1.7%
11-578	Water Plant Operator	\$9.40	hourly	\$19,434.74	1,784.9	177.0	4.4%
11-608	Water Plant Operator	\$9.94	hourly	\$23,824.21	2,006.0	234.5	12.4%
11-790	Water Plant Operator	\$9.31	hourly	\$16,020.58	1,563.0	88.0	New Employee
11-907	Water Plant Operator	\$9.00	hourly	\$2,727.00	282.0	14.0	New Employee
11-960	Water Plant Operator	\$12.84	hourly	\$30,528.89	2,210.0	91.0	7.0%
12-128	Utility Worker	\$11.13	hourly	\$29,418.10	2,193.0	284.0	3.2%
12-147	Utility Worker	\$8.50	hourly	\$1,581.00	186.0		New Employee
12-149	Leak Detection	\$12.49	hourly	\$30,299.55	2,191.0	128.5	1.7%
12-156	Mechanic	\$17.11	hourly	\$38,889.07	2,168.5	52.5	1.5%
12-233	Meters/Inventory/Purchasing	\$14.21	hourly	\$30,825.89	2,121.5	11.5	1.7%
12-252	Utility Worker	\$9.28	hourly	\$14,908.08	1,576.5	3.0	3.1%
12-254	Area Manager	\$44,200.00	salary	\$45,591.43	2,080.0		0.0%
12-324	Electrical Maintenance Mgr	\$50,564.80	salary	\$52,041.25	2,080.0		0.9%
12-349	Utility Worker	\$12.82	hourly	\$40,715.99	2,145.5	241.5	2.6%
12-352	Maintenance Technician	\$16.64	hourly	\$39,308.94	2,196.5	94.0	1.3%
12-374	Utility Worker	\$8.51	hourly	\$340.40	40.0		0.0%
12-471	Utility Worker	\$13.37	hourly	\$30,493.30	2,129.0	83.0	1.4%
12-534	Area Manager	\$41,828.80	salary	\$43,198.43	2,080.0		0.9%
12-576	Area Manager	\$44,033.60	salary	\$45,310.90	2,080.0		1.1%
12-597	Area Manager	\$44,553.60	salary	\$45,949.26	2,080.0		0.9%
12-730	Leak Detection	\$12.81	hourly	\$30,253.13	2,161.0	110.5	2.3%
12-737	Area Manager	\$45,905.60	salary	\$47,351.84	2,080.0		1.1%
12-814	Area Manager	\$48,942.40	salary	\$50,441.73	2,080.0		0.7%
12-821	Utility Worker	\$15.37	hourly	\$34,336.13	2,134.0	48.0	1.7%
12-828	Utility Worker	\$14.04	hourly	\$43,131.85	2,136.5	179.0	2.5%
12-865	Utility Worker	\$9.43	hourly	\$21,671.26	2,082.3	126.0	4.8%
12-905	Equipment Operator	\$15.22	hourly	\$33,559.32	2,120.0	43.5	2.4%
12-912	Operations Manager	\$84,801.60	salary	\$86,712.90	2,080.0		0.0%
12-926	Equipment Operator	\$17.93	hourly	\$39,503.64	2,127.0	35.0	1.5%
12-958	Equipment Operator	\$12.96	hourly	\$25,703.26	1,704.5	163.5	1.9%
12-965	Maintenance Technician	\$14.00	hourly	\$33,794.63	2,175.0	139.0	2.3%

UT MANGEMENT GROUP
Calendar Year 2014

PAYROLL INFO TION
Mountain Water District and Shared Employees

	POSITION	Hourly rate or base pay	RATE	GROSS YEARLY	REG HOURS	OT HOURS	% Increase 2013 to 2014
13-100	Wastewater Plant Operator	\$15.17	hourly	\$35,888.57	2,220.5	84.5	1.4%
13-101	Maintenance Technician	\$9.05	hourly	\$16,393.19	1,642.4	101.0	6.5%
13-255	Maintenance Technician	\$9.87	hourly	\$21,021.44	1,975.1	84.0	4.8%
13-347	Wastewater Plant Operator	\$12.32	hourly	\$27,272.53	2,138.5	23.0	9.0%
13-569	Area Manager	\$56,097.60	salary	\$57,563.35	2,080.0		0.4%
13-779	Wastewater Plant Operator	\$11.56	hourly	\$26,048.14	2,160.0	36.5	2.4%
13-899	Maintenance Technician	\$8.50	hourly	\$3,593.38	399.5	15.5	New Employee
13-973	Maintenance Technician	\$12.57	hourly	\$30,766.93	2,201.0	148.0	1.9%
14-142	Meter Department/Service Supervisor	\$42,723.20	salary	\$43,813.79	2,080.0		1.2%
14-320	Maintenance Technician	\$9.00	hourly	\$12,604.93	1,357.0	17.0	New Employee
14-491	Customer Service Rep	\$8.56	hourly	\$10,616.53	1,214.0	4.3	New Employee
14-512	Cashier	\$9.06	hourly	\$19,638.81	2,115.8	12.5	3.0%
14-515	Customer Service Rep	\$9.75	hourly	\$4,652.61	463.2	3.8	3.9%
14-521	Customer Service Rep	\$8.00	hourly	\$4,763.43	573.3	1.3	New Employee
14-558	Service Tech	\$12.08	hourly	\$26,588.18	2,120.8	33.0	2.2%
14-581	Customer Service Rep	\$12.95	hourly	\$28,260.31	2,126.0	22.0	1.8%
14-634	Service Tech	\$9.17	hourly	\$20,544.36	2,136.5	37.8	5.4%
14-660	Billing Clerk	\$14.20	hourly	\$30,724.13	2,121.3	14.3	2.1%
14-695	Customer Service manager	\$39,582.40	salary	\$8,236.58	428.5		0.7%
14-712	File Clerk	\$8.00	hourly	\$2,990.00	373.8		New Employee
14-965	Service Tech	\$13.71	hourly	\$31,007.58	2,150.5	52.3	1.7%
14-769	Deliquent Billing Clerk	\$12.27	hourly	\$26,920.84	2,148.5	13.3	1.7%
14-781	Customer Service Rep	\$9.00	hourly	\$7,290.47	804.1	4.0	New Employee
14-863	Tank maintenance	\$12.93	hourly	\$12,680.34	951.4	19.5	1.2%
14-940	Service Tech	\$13.04	hourly	\$28,668.07	2,128.5	25.5	2.0%
14-972	Customer Service manager	\$32,177.60	salary	\$33,395.04	2,126.8	10.3	Changed to salaried
15-590	Executive Assistant	\$56,201.60	salary	\$57,618.91	2,080.0		0.9%
15-711	Administrative Assistant	\$12.35	hourly	\$27,269.85	2,136.3	32.0	1.9%
15-744	Executive Assistant	\$54,204.80	salary	\$55,549.09	2,080.0		0.9%
15-772	Senior Project Manager	\$90,000.00	salary	\$93,482.93	2,080.0		0.0%
1c-145	Maintenance Technician	\$13.92	hourly	\$39,145.93	2,209.5	390.0	2.4%
1C-148	Maintenance Technician	\$8.50	hourly	\$3,055.75	347.5	8.0	New Employee
1C-943	Maintenance Technician	\$9.87	hourly	\$3,828.06	335.4	24.0	4.6%
	Shared Employees						
98-226	HR Specialist	\$17.20	hourly	\$39,833.78	2,162.5	90.3	2.4%

EXHIBIT

6(b)(3)

POSITION	KRWA SALARY RANGES 6,000+ CONNECTIONS 2012 MAXIMUM RANGE	UMG SALARY RANGES 17,000+ CONNECTIONS 2014 MAXIMUM RANGE
Manager / Superintendent	\$103,334	\$93,482
Finance Director	\$85,000	\$90,000
Assistant Superintendent	\$75,259	\$86,712
Office Manager	\$69,904	\$57,618
Wastewater Plant Superintendent	\$56,100	\$57,563
Maintenance Supervisor	\$55,735	\$52,041
Distribution Supervisor	\$61,500	\$50,441
Meter Reading Foreman	\$51,813	\$43,813
GIS Specialist	\$65,458	\$43,531
Water Distribution Operator	\$49,300	\$43,198
Laborer	\$46,051	\$43,131
Equipment Operator	\$50,025	\$39,503
Electrician	\$40,000	\$39,308
Wastewater Collection Operator	\$38,293	\$39,145
Mechanic	\$36,587	\$38,889
Wastewater Plant Operator	\$43,410	\$35,888
Bookkeeper	\$45,157	\$34,869
Assistant Office Manager	\$44,117	\$33,395
Meter Reader	\$48,000	\$31,007
Water Plant Operator	\$43,680	\$30,528
Customer Service Rep (CSR)	\$46,114	\$28,260

CASE : Mountain Water District
CASE NO : 2014-00342
RE : PSC Third Data Request
Request for Clarifications

Q 7. Refer to Mountain District's response to Staff's Second Request, Item 10(c).

- (a). In this response, UMG explains that "[t]he amount of overhead costs allocated to each division is based on the ratio of each division's contract amount in relation to the sum of all utility contracts." Provide a detailed description of the relation to the sum of all utility contracts." Provide a detailed description of the relationship of the contract fees paid to UMG to the overhead costs incurred by UMG. Include documentation to show that this ratio results in a reasonable allocation method for these costs.
- (b). Provide the number of customers each utility system listed below served as of June 30, 2014:
- (1) Mountain District;
 - (2) City of Pikeville, Kentucky; and
 - (3) Dickenson County, Virginia Sewer Treatment Plant.
- (c). State whether UMG has executed a contract or entered into an agreement-in-principle with a utility system or systems other than the three listed in Item 7(b) above. If yes, identify each system and provide, by system, the date of the contract or agreement-in-principle and the number of customers as of the date of the contract or agreement-in-principle.

WITNESS : Meyer.

RESPONSE Q7(a):

In allocating UMG's overhead costs to various projects and direct cost centers, a decision was made to utilize the total contract fees associated with each project as the basis for that allocation. Given the varying type of services that UMG provides under its service contracts, it was felt that total contract amounts represented the most objective manner in which to allocate indirect expenses. The actual amount of overhead expenses incurred is based on UMG management decisions as to how to best provide administrative, personnel, accounting, legal and mapping services as well as oversight of direct operations to its various projects in an efficient, consistent, and professional manner.

RESPONSE Q7(b)(1):

17,115 water customers and 2,357 sewer customers.

RESPONSE Q7(b)(2):

This is other client information that UMG does not consider germane to a rate study for Mountain Water District.

RESPONSE Q7(b)(3):

This is other client information that UMG does not consider germane to a rate study for Mountain Water District.

RESPONSE Q7(c)

This is other client information that UMG does not consider germane to a rate study for Mountain Water District

REVISED RESPONSE Q7(a)

The allocation of "corporate overhead expenses" are appropriately divided based on revenue. MWD's share was 64% based on revenue. The ratio matches up favorably to a division based on customers and on total operating expenses. Exhibit 7(a) lists UMG's customers. MWD and the City of Pikeville make up the most of their work, and are the only two that can reasonably be compared. Pikeville has 4,542 water customers and 3,876 sewer customers for a total of 8,418 water and sewer customers. Mountain Water District has 17,115 water customers and 2,357 sewer customers for a total of 19,472 customers. This creates a total of 27,890 combined customers between the two systems, of which the city of Pikeville makes up 30 percent of the total customer base and Mountain Water District 70 percent of the total customer base.

This allocation of corporate overhead expenses is further supported by a review of total costs to run each entity. In 2014, the city of Pikeville's costs for services provided were \$3,979,838.00 while Mountain Water District's expenses were \$6,900,622.00 for a total of \$10,800,460.00. If you look

at each entity's pro rata share of expense, you will see that the city's expense to the total of 36.8% versus 63.2% for the District.

In conclusion, when you look at corporate overhead expense allocation, that the districts share of the fees are in proportion when reviewed from a revenue side, an expense side, and a per-customer basis analysis.

REVISED RESPONSE Q7(b)(2):

The city of Pikeville has 4,542 water customers and 3,876 sewer customers.

The nature and scope of the Pikeville UMG contract varies significantly from the Mountain Water District project. UMG provides management services for the Mountain Water District's water and sewer systems, and also performs customer billing and collection services. For the city of Pikeville, UMG provides management services for the city's water and sewer systems, but does not perform any customer billing or collections services. However, the scope of services for the city of Pikeville also includes garbage collection services public park maintenance, street maintenance, and a gas distributions systems management.

REVISED RESPONSE Q7(b)(3):

Dickenson County, Virginia Sewer Treatment Plant

For Dickenson County, UMG's scope of services is limited to the operation of the waste water treatment plant and sewer collection system. UMG does not deal directly with either water or sewer customers, and therefore the number of customers for those accounts have not been provided.

REVISED RESPONSE Q7(c)

In the past, UMG has also provided management services for the city of Salyersville (water and sewer systems) and to the Troublesome Creek Environmental Authority (wastewater treatment plant and collection system), although those are no longer active contracts. In the same context, in March of this year, UMG began providing management services for the water and sewer systems previously owned and operated by the City of Vicco, and whose ownership was recently transferred to the Perry County Fiscal Court. Each operations contract is different in both the revenue and costs associated

with the contract. Each contract is premised on a wide variety of factors, not just the number of "water/sewer customers" that each particular system has. Attached is a schedule for 2013/2014 that identifies the number of water and sewer customers for each contract (if any), as well as total cost of operation for each contract. As previously stated, UMG allocates its overhead costs to individual projects based on total contract revenue for each project. The only exception is that these overhead costs that are allocated to the two separate facets of UMG's business operations, their management group (AMG - heating and cooling services) and small engine solution (SES – small engine repair). It was estimated that on average, UMG corporate personnel spent 5% of their time on AMG activities and 5% of their time on SES activities. This is an estimated percentage and is not based on a formal time study.

EXHIBIT

7(a)

UTILITY MANAGEMENT GROUP
INFORMATION RELATED TO OTHER UTILITY PROJECTS

April 2015

CITY OF PIKEVILLE			
	2012	2013	2014
UTILITY CUSTOMERS			
Water	4,576	4,584	4,542
Sewer	3,896	3,904	3,876
TOTAL REVENUE	4,041,086	4,164,034	4,227,677
TOTAL EXPENSES	3,946,906	4,072,548	3,979,838
NUMBER OF DIRECT EMPLOYEES			

Scope of services includes water/sewer systems, garbage collection, street maintenance, parks maintenance, gas distribution system.

DICKENSON COUNTY, VIRGINIA			
	2012	2013	2014
UTILITY CUSTOMERS			
Water	N/A	N/A	N/A
Sewer	N/A	N/A	N/A
TOTAL REVENUE	0	144,833	158,438
TOTAL EXPENSES	1,562	106,663	93,361
NUMBER OF DIRECT EMPLOYEES	1.5	1.5	1.5

Scope of services is limited to operation of sewerage treatment plant and lift stations.

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY			
	2012	2013	2014
UTILITY CUSTOMERS			
Water	N/A	N/A	N/A
Sewer	38	N/A	N/A
TOTAL REVENUE	66,005	56,733	N/A
TOTAL EXPENSES	40,314	45,049	N/A
NUMBER OF DIRECT EMPLOYEES	1	1	N/A

Scope of services included sewer services only.

PERRY COUNTY WATER & SEWER				
	2012	2013	2014	2015
UTILITY CUSTOMERS				
Water	N/A	N/A	N/A	986
Sewer	N/A	N/A	N/A	158
TOTAL REVENUE	N/A	N/A	N/A	133,440 A
TOTAL EXPENSES	N/A	N/A	N/A	 B
NUMBER OF DIRECT EMPLOYEES	N/A	N/A	N/A	4

Contract operations began 3/2/15; initially a 6 month contract (water & sewer systems).
 A - Revenue represents contract amount for 6 months.
 B - Actual expenses not known; operations just initiated

Case: Mountain Water District
Case No: 2014-00342
RE: PSC Clarification Data Request

Original Response – PSC Third Data Request

Question 11

The Commission's past practice has been to use a three-year average of the principal and interest payments (debt service) for long-term debt in calculating the revenue requirement for water districts and associations.

- a. Using the amortization schedules for Mountain District's outstanding long-term debt provided in its response to Item 17.c. of Staffs First Request, calculate the water division's three-year average debt service using the principal and interest payments for calendar years 2015, 2016, and 2017.
- b. Indicate the effect the three-year average debt service calculated in Mountain District's response to Item 11.a. will have on the water division's requested revenue requirement.
- c. Provide copies of all calculations, work papers, and assumptions used by Mountain District in responding to Items 11.a. and 11.b.

WITNESS: Spears

RESPONSE:

- a. See attached Excel File Item 11(a) and hard copy attached.
- b. See attached Excel File – Item 11(a) and hard copy attached, the calculation for this answer is at the bottom. The net result would be an increase in Water rates above what is requested by \$0.61 per month per customer.
- c. The only work papers used other than the Excel file is the documentation in the original filing of the Amortization Schedules which are attached.

Clarification Response – PSC Third Data Request

REVISED RESPONSE:

- a. See revised attached Excel File Exhibit 11(a) with short term loans removed from debt service.
- b. The net result would be an increase in Water rates above what is requested by \$0.34 per month per customer. Please see the calculation at the bottom of revised Exhibit 11(a).

EXHIBIT

11 (A)

**Mountain Water District
Debt Service
Fiscal year ended June 30, 2014**

WATER				15-Jun		16-Jun		17-Jun		3 YEAR TOTAL
Acct	Loan	Jun-13	Jun-14	Principle	Interest	Principle	Interest	Principle	Interest	
2200.00	RD WTP	629,000.00	621,000.00	8,000.00	27,945.00	8,000.00	27,585.00	8,000.00	27,225.00	106,755.00
2202.00	KY Rural Water	6,270,000.00	6,100,000.00	354,166.63	165,693.80	359,583.33	158,610.43	364,583.37	151,418.76	1,554,056.32
2205.00	RD 91-33	1,534,000.00	1,512,000.00	23,000.00	68,040.00	24,000.00	67,005.00	26,000.00	65,925.00	273,970.00
2218.00	KIA Multi	2,329,679.17	2,136,893.48	198,417.02	60,541.74	204,212.83	54,745.93	210,177.96	48,780.80	776,876.28
2219.00	KIA Indian Cr.	153,527.55	140,885.50	13,024.15	4,129.56	13,417.79	3,735.96	13,823.36	3,330.40	51,461.22
2221.00	KIA Water Plant	711,024.48	652,020.25	60,071.09	11,467.25	61,157.43	10,381.11	62,263.01	9,275.33	214,615.22
2223.00	RD Russell Fork Water Plant	688,000.00	673,000.00	15,000.00	21,628.75	16,000.00	21,125.00	16,000.00	20,605.00	110,358.75
2283.00	UMG(500,000)	92,229.40	-	-	-	-	-	-	-	-
Total Principle and Interest for 3 Years										<u><u>3,088,092.79</u></u>
Average for 3 Years										1,029,364.26
Principle and Interest per Exhibit B-2 of the Application										958,552.00
Effect on the Rate Study										<u>70,812.26</u>
Number of Water Customers										17,131.00
Annual Increase per Customer										<u>4.13</u>
Monthly Increase per Customer										<u>0.34</u>

Case: Mountain Water District
Case No: 2014-00342
RE: PSC Clarification Data Request

Original Response – PSC Third Data Request

Q 14(c) Provide a detailed description for any gallons of water that Mountain District reports in the category “Other” listed under “Other Water Used” on Schedule 2 of this request for information. Include in Mountain District’s response an explanation as to how the gallons reported were calculated/estimated.

WITNESS: Potter

RESPONSE:

The “Other” category listed is from work orders regarding customer reported use, leak adjustment calculated water loss, as well as calculated use of illegal connections found during the month. The illegal amount is calculated based on the circumstance of finding the illegal connection. If the customer has cut the lock off of the meter, the usage is calculated based on the difference in the reading on the meter when it is pulled and the last official reading when it was disconnected for nonpayment. If the customer has installed a straight pipe or other means of illegally obtaining water and it wasn’t metered, it is calculated from the customer’s average usage prior to disconnection and multiplied by the number of months the illegal connection was present (i.e. The number of months it was disconnected for nonpayment until it was discovered). The “Other” category also includes the amount of water that was accounted for under “Water Sales” but was written off due to customer leaks according to the District’s policy regarding line leak adjustments and the metered water that the District uses in the course of daily business.

Clarification Response – PSC Third Data Request

REVISED RESPONSE: In the interest of clarity for the response to this question, several attachments have been provided. The example used to demonstrate the origin of the number of gallons reported for the “Other” usage is derived from June, 2014 reports; the last month of the test year. Please see attachment 14c (1), which is the Monthly Water Loss Report generated each month to calculate the District’s water loss percentage. The “other” water listed on Schedule 2 as provided, is derived from the two items listed on the Monthly Water Loss Report {14c (1)} as “Net Computer Adjustment” and “Other”.

The “Net Computer Adjustment” is the number of gallons written off due to Customer Adjustments for leaks on the customer’s side in accordance with Mountain Water District’s policy and included in the District’s tariff approved by the Public Service Commission. Please see attachment 14c (2), which is the monthly report which accounts for this water each month. As you can see, the 530,425 gallons on 14c (2) has been rounded down to 530,000 and entered onto the line in the Monthly Water Loss Report {14c (1)} for “Net Computer Adjustment”.

Case: Mountain Water District
Case No: 2014-00342
RE: PSC Clarification Data Request

The "Other" usage on the Monthly Water Loss Report is derived from the District's Accounted Water Loss Report's Fire Dept/Usage column, and the Unauthorized Usage Report {Please see attachments 14c (3) and 14c (4) respectively}. The fire department usage in the Fire Dept/Usage column, if any was reported, is subtracted from the total and added to the fire department amount on the Monthly Water Loss Report. The remaining usage is taken directly from work orders that account for reported gallons of withdrawals from hydrants and the Mountain Water District's monthly usage for daily operations that is metered but not billed. As you can see, the 1,412,270 gallons from the Accounted Water Loss Report {14c (3)} and the 42,900 gallons from the Unauthorized Usage Report {14c (4)} have been added together to total 1,455,170, rounded down to 1,455,000 gallons and added to the Monthly Water Loss Report under "Other".

To complete Schedule 2, the amounts from each Monthly Water Loss Report for "Net Computer Adjustment" and "Other" water loss for the period specified, were added together to obtain the total number; the test period number being 31,143,000 gallons. Please see attachment 14c (5) with highlighted gallon amounts totaling the 31,143,000 gallons reported on Schedule 2.

EXHIBIT
Schedule 2

SCHEDULE 2

Mountain Water District
Case No. 2014-00342
Water Loss Comparison

	Calendar Year 2013	Test Year 07/01/2013 - 06-30-2014	Calendar Year 2014
Water Produced	893,244,000	939,882,000	948,905,000
Water Purchased	735,778,000	737,197,000	720,732,000
Total Water Produced and Purchased	1,629,022,000	1,677,079,000	1,669,637,000
Water Sales:			
Residential	702,157,000	722,031,000	712,187,000
Commercial	94,836,000	88,783,000	77,945,000
Industrial	7,434,000	6,346,000	6,729,000
Multi-User	29,017,000	29,042,000	31,829,000
Public Authority	105,884,000	113,737,000	123,140,000
Bulk Loading Stations	0	0	0
Resale	0	0	0
Other	0	0	0
Total Water Sales	939,328,000	959,939,000	951,830,000
Other Water Used:			
Utility/Water Treatment Plant	14,404,000	13,911,000	13,915,000
Wastewater Plant	0	0	0
System Flushing	99,043,000	105,432,000	102,202,000
Fire Department	73,312,000	74,928,000	74,566,000
Other:	7,960,000	31,143,000	35,693,000
Total Other Water Used	194,719,000	225,414,000	226,376,000
Water Loss:			
Tank Overflows	9,555,000	6,067,000	0
Line Breaks	2,406,150	2,396,750	609,000
Line Leaks	32,751,715	25,065,425	22,751,720
Other	0	0	0
Total Water Loss	44,712,865	33,529,175	23,360,720
% Water Loss	28%	27%	28%

EXHIBIT

14c(1)

Monthly Water Loss Report

Water Company: MOUNTAIN WATER DISTRICT

For the Month of: JUNE 2014

Water Produced this Month: 80918 gallons*

Water Purchased this Month: 55387 gallons*

A: Total Water Produced and Purchased = 136,305 gallons*

Sold:	Residential	62883	gallons*
	Commercial	6350	gallons*
	Industrial	712	gallons*
	Multi-User	2517	gallons*
	Public Authority	12136	gallons*
	Water Salesman	0	gallons*

Total Sold = 84,598 gallons*

B: Difference: (Produced + Purchased)- Sold = 51,707 gallons*

%Difference = 37.93% % total water loss

Gallons of Water Accounted For:

Breaks (Estimated Total)	6339	gallons*
Hydrant Flushing	8215	gallons*
Storage Tank Overflow	0	gallons*
Water Treatment Plant Use	1320	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	6599	gallons*
* Net Computer Adjustment +/-	530	gallons*
* Other	1455	gallons*

C: Total Gallons Accounted For = 24,458 gallons*

Loss: Unaccounted-for Water: (B-C) = 27,249 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 19.99% % unaccounted for loss

30 Days in A Month

Gallons / Day Loss = 908,300 gallons/day

Gallons / Min Loss = 631 gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

EXHIBIT

14c(2)

**MOUNTAIN WATER DISTRICT
MONTHLY CUSTOMER ADJUSTMENTS
JUNE 2014**

CUSTOMER NAME:	ACCT NO:	AMT OF BILL:	AMT OF ADJMT:	BAL AFT ADJ:	NO OF MOS ADJ:	GALS:	CSR:
		\$ 259.50	\$ 95.77	\$ 163.73	3	23,279	DR
		\$ 156.79	\$ 54.77	\$ 102.02	2	16,690	SM
		\$ 93.31	\$ 34.38	\$ 58.93	1	10,430	DR
		\$ 107.38	\$ 14.33	\$ 93.05	2	4,080	SM
		\$ 337.59	\$ 122.48	\$ 215.11	3	31,437	SM
		\$ 1,162.28	\$ 501.18	\$ 661.10	3	156,589	MKW
		\$ 187.30	\$ 72.02	\$ 115.28	1	24,443	SM
		\$ 68.71	\$ 20.44	\$ 48.27	1	5,820	DR
		\$ 278.13	\$ 74.70	\$ 203.43	3	18,020	DR
		\$ 603.33	\$ 114.45	\$ 488.88	3	34,889	DR
		\$ 86.45	\$ 20.90	\$ 65.55	2	5,946	SM
		\$ 390.90	\$ 89.79	\$ 301.11	3	22,249	SM
		\$ 521.58	\$ 214.16	\$ 307.42	3	68,350	SM
		\$ 172.77	\$ 58.23	\$ 114.54	3	16,290	SM
		\$ 180.07	\$ 25.16	\$ 154.91	3	7,160	MW
		\$ 111.28	\$ 15.81	\$ 95.47	2	4,500	MKW
		\$ 135.50	\$ 27.59	\$ 107.91	1	2,900	MKW
		\$ 53.41	\$ 12.77	\$ 40.64	1	3,633	DR
		\$ 118.43	\$ 44.95	\$ 73.48	1	10,970	DR
		\$ 531.17	\$ 226.71	\$ 304.46	3	62,750	SM

Total Billed: \$ 5,555.88 After adj: \$ 3,715.29

530,425

Total adj: \$ 1,840.59

THESE ADJUSTMENTS WERE APPROVED BY THE BOARD OF COMMISSIONERS AT THE
REGULAR MONTHLY MEETING HELD ON JULY 30, 2014

CHAIRPERSON JAMES: _____

EXHIBIT

14c(3)

MOUNTAIN WATER DISTRICT
ACCOUNTED WATERLOSS REPORT
 JUNE 2014

DATE	WORK ORDER	MASTER METER	WATER LOSS	LINE SIZE	BREAK	LEAK	FLUSH	OVERFLOW	FIRE DEPT / USAGE	LOCATION	BROKEN BY /	BILLED TO
6/27/2014	121234	WATERPLANT	2,500	3/4"		2,500				255 ASHLICK FORK		
6/30/2014	121384	BIG CREEK	5,000	3/4"		5,000				739 DIX FORK		
6/3/2014	119754	ABNER FORK	13,000	HYD					13,000	68 HUNTS BR.		
6/6/2014	119954	WILLIAMSON 1	10,000	HYD					10,000	195 HARVE VARNEY RD.		
6/11/2014	120154	SOOKEY 1	1,000	HYD					1,000	101 TACKETT BR.		
6/19/2014	120729	COWPEN	3,700	HYD					3,700	155 LICK HOLLOW		
6/16/2014	120605	MILLARD	28,000	HYD					28,000	4336 RACCON RD.		
6/17/2014	120651	TOWN MTN	7,000	HYD					7,000	246 MAYNARD HILL		
6/16/2014	120542	SOOKEY 2	5,000	HYD					5,000	CANEY HWY		WATER WORKS STEAM CLEANING
6/16/2014	120543	SOOKEY 2	5,000	HYD					5,000	DORTON		WATER WORKS STEAM CLEANING
6/16/2014	120544	TOWN MTN	5,000	HYD					5,000	TOWN MTN		WATER WORKS STEAM CLEANING
6/16/2014	120545	TOWN MTN	5,000	HYD					5,000	WINNS BR.		WATER WORKS STEAM CLEANING
6/30/2014	70114	COON BR	8,000	HYD					8,000	T & N CONCRETE		
6/30/2014	119480	SOOKEY 1	886,000	HYD					886,000	VIRGIE TRAIN TUNNEL		AMEC
6/30/2014	70214	WILLIAMSON 1	11,910	HYD					11,910	SOUTH WILLIAMSON		INDUSTRIAL MACHINE AND TOOLS
6/30/2014	7001	SOOKEY 1	378,550	3/4"					378,550	MWD		
6/30/2014	7002	SOOKEY 1	1,970	3/4"					1,970	MWD		
6/30/2014	7003	SOOKEY 1	1,360	3/4"					1,360	MWD		
6/30/2014	7004	WILLIAMSON 1	10	3/4"					10	MWD		
6/30/2014	7005	WILLIAMSON 1	1,030	3/4"					1,030	MWD		
6/30/2014	7006	WILLIAMSON 1	36,100	3/4"					36,100	MWD		
6/30/2014	7007	TOWN MTN	370	3/4"					370	MWD		
6/30/2014	7008	TOWN MTN	3,260	3/4"					3,260	MWD		
6/30/2014	7009	TOWN MTN	170	3/4"					170	MWD		
6/30/2014	7010	TOWN MTN	380	3/4"					380	MWD		
6/30/2014	7011	WATERPLANT	10	3/4"					10	MWD		
6/30/2014	7012	WATERPLANT	290	3/4"					290	MWD		
6/30/2014	7013	WATERPLANT	160	3/4"					160	MWD		
TOTAL WATERLOSS			15,965,420			46,500	6,292,140	8,214,510	0	1,412,270		

(No fire department usage was turned in for June, 2014. Other wise, it would have been subtracted from the total and added under "Fire Dept. Usage" on the report.)

**MOUNTAIN VIEW DISTRICT
ACCOUNTED WATERLOSS REPORT
JUNE 2014**

DATE	WORK ORDER	MASTER METER	WATER LOSS	LINE SIZE	BREAK	LEAK	FLUSH	OVERFLOW	FIRE DEPT / USAGE	LOCATION	BROKEN BY /	BILLED TO
6/2/2014	119601	MARROWBONE	1,500				1,500			7874 MARROWBONE CREEK RD. ELKHORN		
6/3/2014	119745	TOWN MTN	50,000				50,000			58 WINNS BRANCH		
6/4/2014	119815	MARROWBONE	1,000				1,000			80 MARROWBONE STREET		
6/6/2014	119816	SOOKEY 1	1,800				1,800			1521 SUGARCAMP BR.		
6/4/2014	119836	WILLIAMSON 1	10				10			146 MURPHY BTM		
6/5/2014	119868	ABNER FORK	1,000				1,000			35 LITTLE HACKNEY CREEK		
6/5/2014	119853	MARROWBONE	1,000				1,000			141 BOWENS RD.		
6/9/2014	120045	MARROWBONE	500				500			60 ELIZABETH CHILDERS RD.		
6/10/2014	120568	WATERPLANT	2,000				2,000			36 ALAN STREET		
6/11/2014	120209	SOOKEY 1	1,200				1,200			1992 INDIAN CREEK		
6/11/2014	120156	BIG CREEK	28,800				28,800			BIG CREEK		
6/12/2014	120345	SOOKEY 1	4,500				4,500			35 TACKETT BR.		
6/12/2014	120365	SOOKEY 1	2,000				2,000			445 LF FK LONG FORK		
6/12/2014	120377	META	2,500				2,500			1976 SUNSHINE LANE. KIMPER		
6/12/2014	120577	WATERPLANT	10,000				10,000			7219 RACCOON RD.		
6/13/2014	120513	MILLARD	500				500			39 WHITE PINE ROAD		
6/13/2014	120506	WATERPLANT	6,000				6,000			4626 RACCOON RD.		
6/13/2014	120525	MILLARD	1,000				1,000			36 ALAN STREET		
6/13/2014	120526	TOWN MTN	8,000				8,000			145 MCCOY HOLLOW		
6/13/2014	120376	TOWN MTN	2,500				2,500			1581 GRASSY ROAD		
6/14/2014	120581	TOWN MTN	500				500			2094 GRASSY BR.		
6/14/2014	120582	SOOKEY 1	500				500			1716 LF FK LONG FORK		
6/15/2014	120584	WATERPLANT	4,000				4,000			7219 RACCOON RD.		
6/16/2014	120532	SOOKEY 1	1,500				1,500			1900 INDIAN CREEK ROAD.		
6/16/2014	120538	SOOKEY 1	305,000				305,000			SV AREA FLUSHING		
6/16/2014	120538	SOOKEY 2	285,000				285,000			SV AREA FLUSHING		
6/16/2014	120538	ISLAND CREEK	65,000				65,000			SV AREA FLUSHING		
6/16/2014	120538	MODERN MHP	4,000				4,000			SV AREA FLUSHING		
6/16/2014	120538	COON BR	6,500				6,500			SV AREA FLUSHING		
6/16/2014	120538	HOOPWOOD	3,000				3,000			SV AREA FLUSHING		
6/16/2014	120538	CEDAR GAP	110,000				110,000			SV AREA FLUSHING		
6/16/2014	120539	MILLARD	300,000				300,000			MC AREA FLUSHING		
6/16/2014	120539	GREASY	350,000				350,000			MC AREA FLUSHING		
6/16/2014	120539	CHLOE	150,000				150,000			MC AREA FLUSHING		
6/16/2014	120539	INDIAN HILLS	100,000				100,000			MC AREA FLUSHING		

**MOUNTAIN WATER DISTRICT
ACCOUNTED WATERLOSS REPORT
JUNE 2014**

DATE	WORK ORDER	MASTER METER	WATER LOSS	LINE SIZE	BREAK	LEAK	FLUSH	OVERFLOW	FIRE DEPT / USAGE	LOCATION	BROKEN BY /	BILLED TO
6/16/2014	120539	MARROWBONE	350,000				350,000			MC AREA FLUSHING		
6/16/2014	120539	ABNER FORK	100,000				100,000			MC AREA FLUSHING		
6/16/2014	120540	TOWN MTN	1,800,000				1,800,000			GV AREA FLUSHING		
6/16/2014	120540	META	400,000				400,000			GV AREA FLUSHING		
6/16/2014	120540	BIG CREEK	1,200,000				1,200,000			GV AREA FLUSHING		
6/16/2014	120541	WILLIAMSON 1	1,700,000				1,700,000			PC AREA FLUSHING		
6/16/2014	120541	WILLIAMSON 2	750,000				750,000			PC AREA FLUSHING		
6/6/2014	120555	MILLARD	2,000				2,000			36 ALAN STREET		
6/16/2014	120558	WATERPLANT	1,500				1,500			1235 CAMP CREEK RD.		
6/16/2014	120559	WATERPLANT	2,500				2,500			440 N. JOHNSON BTM		
6/16/2014	120576	COWPEN	5,000				5,000			1022 CLEVINGER BR.		
6/16/2014	120610	SOOKEY 2	3,000				3,000			134 S. HERITAGE DRIVE		
6/18/2014	120662	SOOKEY 1	3,500				3,500			2644 L FK LONG FORK R. VIRGIE		
6/18/2014	120681	ABNER FORK	200				200			68 LITTLE HACKNEY CREEK		
6/19/2014	120697	ABNER FORK	1,000				1,000			3940 FEDS CREEK RD.		
6/19/2014	120721	MILLARD	1,000				1,000			36 ALAN STREET		
6/19/2014	120736	SOOKEY 1	1,500				1,500			35 TACKETT BR.		
6/20/2014	121053	WATERPLANT	1,500				1,500			45859 ST HWY. 194 E.FREEBURN		
6/23/2014	120867	SOOKEY 1	5,000				5,000			192 PETER BRANCH		
6/23/2014	120871	WATERPLANT	2,000				2,000			45859 ST HWY. 194 E.FREEBURN		
6/23/2014	120902	SOOKEY 1	2,000				2,000			1886 INDIAN CREEK		
6/23/2014	120945	MARROWBONE	1,000				1,000			8125 MARROWBONE CREEK		
6/24/2014	120948	ABNER FORK	10,000				10,000			18318 GRAPEVINE RD.		
6/24/2014	120952	MARROWBONE	1,000				1,000			820 ALLEGHENY		
6/24/2014	120953	ABNER FORK	5,000				5,000			9955 ST HWY 194 E. KIMPER		
6/24/2014	120956	MARROWBONE	1,000				1,000			141 BOWENS RD.		
6/24/2014	120959	ABNER FORK	500				500			145 ROWE CAMP RD.		
6/24/2014	120968	MARROWBONE	1,000				1,000			27 HELLIER HILL		
6/24/2014	120969	ABNER FORK	10,000				10,000			18493 GRAPEVINE RD.		
6/24/2014	120971	BIG CREEK	2,500				2,500			19375 E. BIG CREEK		
6/24/2014	120972	ABNER FORK	10,000				10,000			10433 ST HWY 194 E.KIMPER		
6/24/2014	121069	JOHNS CRK	2,000				2,000			11 ZION RD. KIMPER		
6/25/2014	121056	ABNER FORK	5,500				5,500			18673 GRAPEVINE		
6/25/2014	121038	ABNER FORK	2,000				2,000			2849 FEDS CREEK RD.		
6/25/2014	121057	MILLARD	3,000				3,000			36 ALAN STREET		
6/25/2014	121071	MARROWBONE	1,000				1,000			4974 POORBOTTOM, ROCKHOUSE		
6/25/2014	121077	ABNER FORK	3,000				3,000			1000 UPPER JOHNS CREEK		
6/26/2014	121194	ABNER FORK	2,000				2,000			478 HENRY BR. RD.		
6/26/2014	121258	ABNER FORK	8,000				8,000			5975 ST HWY 194 W.		
6/28/2014	121351	MARROWBONE	3,500				3,500			801 BOWLING FORK		
6/5/2014	119856	MILLARD	500	3/4"	500					1234 SLONES BR.	KY HWY DEPT	
6/9/2014	120060	WATERPLANT	5,000	3/4"	5,000					BONES BRANCH	PIKE COUNTY ROAD DEPT	
6/17/2014	120637	SOOKEY 1	1,000	3/4"	1,000					1405 OSBOURNE FORK	JIMMY ROSE	
6/1/2014	119824	TOWN MTN	30,000	4"		30,000				555 WINNS BR.		
6/10/2014	120099	GREASY	1,728,000	6"		1,728,000				1913 GREASY CREEK		
6/10/2014	120520	WATERPLANT	40,000	8"		40,000				ABBY BRANCH, PHELPS		
6/17/2014	120664	META	576,000	4"		576,000				CAMP CREEK, STOPOVER	KY HWY DEPT	
6/21/2014	121055	COON BR	35,000	4"		35,000				970 FROZEN CREEK		

MOUNTAIN WATER DISTRICT
ACCOUNTED WATERLOSS REPORT
 JUNE 2014

DATE	WORK ORDER	MASTER METER	WATER LOSS	LINE SIZE	BREAK	LEAK	FLUSH	OVERFLOW	FIRE DEPT / USAGE	LOCATION	BROKEN BY /	BILLED TO
6/21/2014	121064	WATERPLANT	10,000	4"		10,000				970 FROZEN CREEK		
6/22/2014	121066	MARROWBONE	26,000	8"		26,000				1750 MARROWBONE		
6/26/2014	121257	COWPEN	7,500	2"		7,500				2550 COWPEN RD.		
6/10/2014	120089	WATERPLANT	15,000	4"	15,000					1035 CAMP CREEK	PIKE COUNTY ROAD DEPT	
6/18/2014	120693	TOWN MTN	10,000	4"	10,000					1607 BURNING FORK	PIKE COUNTY ROAD DEPT	
6/24/2014	120980	BIG CREEK	15,000	4"	15,000					DIX FORK	PIKE COUNTY ROAD DEPT	
6/2/2014	119610	TOWN MTN	5,000	3/4"		5,000				6846 ZEBULON HWY		
6/2/2014	119614	COWPEN	1,200	3/4"		1,200				2899 COWPEN RD.		
6/4/2014	119809	WILLIAMSON 1	10,000	3/4"		10,000				MURPHY BOTTOM		
6/4/2014	119814	BIG CREEK	3,000	3/4"		3,000				17628 E. BIG CREEK		
6/4/2014	119835	MARROWBONE	14,400	3/4"		14,400				1404 MARROWBONE CREEK		
6/5/2014	119851	ABNER FORK	20,000	3/4"		20,000				43 ANDERSON ROAD		
6/6/2014	119936	WATERPLANT	86,400	3/4"		86,400				15 OLD SHELBIANA RD.		
6/9/2014	120046	COON BR	2,500	3/4"		2,500				217 JOHNS BRANCH		
6/10/2014	120088	CEDAR GAP	1,000	3/4"		1,000				2981 HURRICANE FIRE DEPT.		
6/10/2014	120098	SOOKEY 1	2,500	3/4"		2,500				1164 LITTLE CREEK		
6/10/2014	120102	SOOKEY 1	43,200	3/4"		43,200				4712 LITTLE ROBINSON		
6/10/2014	120131	WATERPLANT	72,000	3/4"		72,000				5575 E. SHELBIANA RD.		
6/12/2014	120347	ISLAND CREEK	28,000	3/4"		28,000				1135 ROAD FORK		
6/13/2014	120521	WILLIAMSON 1	500	3/4"		500				939 TAYLOR FORK ROAD		
6/13/2014	120522	SOOKEY 2	2,000	3/4"		2,000				2817 COLLINS HWY		
6/16/2014	120533	SOOKEY 1	2,000	3/4"		2,000				1971 BOOKER FORK		
6/17/2014	120556	JOHNS CRK	2,000	3/4"		2,000				50648 HWY 194 E.		
6/16/2014	120557	WILLIAMSON 1	5,600	3/4"		5,600				30 KATE CAMP BR.		
6/16/2014	120598	WATERPLANT	5,000	3/4"		5,000				1038 HURRICANE CREEK		
6/17/2014	120627	SOOKEY 1	1,500	3/4"		1,500				950 COLLINS HWY.		
6/17/2014	120628	JOHNS CRK	3,000	3/4"		3,000				1105 SYCAMORE RD.		
6/17/2014	120663	WATERPLANT	500	3/4"		500				2817 COLLINS HWY		
6/17/2014	120665	CHLOE	1,728,000	3/4"		1,728,000				CHLOE		
6/18/2014	120673	MILLARD	14,400	3/4"		14,400				1997 LOWER POMPEY RD.		
6/18/2014	120694	WATERPLANT	1,728,000	3/4"		1,728,000				BLAIR ADKINS STREET		
6/19/2014	120733	BIG CREEK	3,500	3/4"		3,500				3630 LONG BRANCH		
6/23/2014	120860	TOWN MTN	3,000	3/4"		3,000				LF FRK OF GRASSY , RACCOON		
6/23/2014	120862	TOWN MTN	3,000	3/4"		3,000				JUST BEHIND ZEBULON CHURCH OF CHRIST		
6/23/2014	120910	WATERPLANT	8,640	3/4"		8,640				130 FORDS BRANCH	PIKE COUNTY ROAD DEPT	
6/23/2014	121068	SOOKEY 2	500	3/4"		500				1381 KY HIGHWAY		
6/24/2014	120936	MILLARD	600	3/4"		600				3 WOLFPEN BR.		
6/24/2014	120946	WATERPLANT	2,000	3/4"		2,000				1169 KENDRICK FORK		
6/24/2014	120951	BIG CREEK	1,500	3/4"		1,500				66 WILLIAMSON RD.		
6/24/2014	120964	MARROWBONE	5,400	3/4"		5,400				40 CHILRESS RD.		
6/25/2014	121058	BIG CREEK	3,000	3/4"		3,000				11802 BENT BR.		
6/26/2014	121179	META	2,000	3/4"		2,000				1237 OPEN FORK		
6/26/2014	121195	WILLIAMSON 1	2,000	3/4"		2,000				34 LF TURKEY TOE		
6/27/2014	121224	WATERPLANT	4,800	3/4"		4,800				692 HARLESS CREEK		
6/27/2014	121217	MARROWBONE	4,000	3/4"		4,000				HELLIER		
6/26/2014	121199	BIG CREEK	1,500	3/4"		1,500				163 HIGGINS RD.		
6/27/2014	121225	WATERPLANT	2,500	3/4"		2,500				51765 MAJESTIC KNOX SCHOOL	PIKE COUNTY BOARD OF EDUCATION	
6/27/2014	121232	WATERPLANT	2,500	3/4"		2,500				4878 GRESY CREEK		

EXHIBIT

14c(4)

**MOUNTAIN WATER DISTRICT
UNAUTHORIZED USAGE REPORT
JUNE 2014**

DATE:	LAST NAME RECORDED:	911 LOCATION:	ACCOUNT NUMBER:	WORK ORDER:	METHOD TO DETER THEFT:	WATER GAL.:	FEES:	RESOLU- TION:
6/4/14				487	Pulled/re-install meter	2,950	\$ 284.15	Resolved
6/5/14				802	Pulled meter	13,300	\$ 317.51	Resolved
6/6/14				878	Pulled/re-install meter	3,260	\$ 252.85	Resolved
6/10/14				020	Pulled meter	0	\$ 356.05	
6/16/14				349	Pulled meter	400	\$ 220.15	
6/13/14				350	Pulled meter	4,500	\$ 253.67	
6/16/14				353	Pulled meter	1,420	\$ 310.46	Resolved
6/16/14				354	Pulled/re-install meter	3,520	\$ 342.72	Resolved
6/16/14				514	Pulled meter	770	\$ 240.77	
6/16/14				515	Pulled/re-install meter	3,080	\$ 263.97	Resolved
6/16/14				516	Pulled meter	6,440	\$ 299.10	
6/17/14				528	Pulled straight pipe	2,700	\$ 255.54	Resolved
6/27/14				111	Pulled meter	170	\$ 240.77	
6/27/14				112	Pulled meter	390	\$ 240.77	
						42,900		

TOTAL: \$3,276.82

*** Some fees do not include water usage charges - those will be added to the next water bill if applicable. ***

EXHIBIT

14c(5)

Monthly Water Loss Report

Water Company: MOUNTAIN WATER DISTRICT

For the Month of: JULY 2013

Water Produced this Month: 74084 gallons*

Water Purchased this Month: 75849 gallons*

A: Total Water Produced and Purchased = 149,933 gallons*

Sold:	Residential	61360	gallons*
	Commercial	6691	gallons*
	Industrial	475	gallons*
	Multi-User	2208	gallons*
	Public Authority	8124	gallons*
	Water Salesman	0	gallons*

Total Sold = 78,858 gallons*

B: Difference: (Produced + Purchased)- Sold = 71,075 gallons*

%Difference = 47.40% % *total water loss*

Gallons of Water Accounted For:

Breaks (Estimated Total)	1790	gallons*
Hydrant Flushing	12053	gallons*
Storage Tank Overflow	7	gallons*
Water Treatment Plant Use	1255	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	6632	gallons*
Net Computer Adjustment +/-	1100	gallons*
Other	545	gallons*

C: Total Gallons Accounted For = 23,382 gallons*

Loss: Unaccounted-for Water: (B-C) = 47,693 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 31.81% % unaccounted for loss

	31	Days in A Month
Gallons / Day Loss =	1,538,484	gallons/day
Gallons / Min Loss =	1,068	gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company: MOUNTAIN WATER DISTRICT

For the Month of: AUGUST 2013

Water Produced this Month:	75499	gallons*
Water Purchased this Month:	50401	gallons*

A: Total Water Produced and Purchased = 125,900 gallons*

Sold:	Residential	61580	gallons*
	Commercial	7995	gallons*
	Industrial	532	gallons*
	Multi-User	2404	gallons*
	Public Authority	9281	gallons*
	Water Salesman	0	gallons*

Total Sold = 81,792 gallons*

B: Difference: (Produced + Purchased)- Sold = 44,108 gallons*

%Difference = 35.03% % *total water loss*

Gallons of Water Accounted For:

Breaks (Estimated Total)	2455	gallons*
Hydrant Flushing	6962	gallons*
Storage Tank Overflow	1610	gallons*
Water Treatment Plant Use	1242	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	6415	gallons*
Net Computer Adjustment +/-	988	gallons*
Other	527	gallons*

C: Total Gallons Accounted For = 20,199 gallons*

Loss: Unaccounted-for Water: (B-C) = 23,909 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 18.99% % unaccounted for loss

	31	Days in A Month
Gallons / Day Loss =	771,258	gallons/day
Gallons / Min Loss =	536	gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company: MOUNTAIN WATER DISTRICT

For the Month of: SEPTEMBER 2013

Water Produced this Month: 72875 gallons*

Water Purchased this Month: 60400 gallons*

A: Total Water Produced and Purchased = 133,275 gallons*

Sold: Residential 58665 gallons*

Commercial 8259 gallons*

Industrial 491 gallons*

Multi-User 2164 gallons*

Public Authority 9410 gallons*

Water Salesman 0 gallons*

Total Sold = 78,989 gallons*

B: Difference: (Produced + Purchased)- Sold = 54,286 gallons*

%Difference = 40.73% % total water loss

Gallons of Water Accounted For:

Breaks (Estimated Total) 1593 gallons*

Hydrant Flushing 8920 gallons*

Storage Tank Overflow 2700 gallons*

Water Treatment Plant Use 1226 gallons*

Wastewater Treatment Plant Use** 0 gallons*

Fire Department Use 6529 gallons*

Net Computer Adjustment +/- 1189 gallons*

Other 548 gallons*

C: Total Gallons Accounted For = 22,705 gallons*

Loss: Unaccounted-for Water: (B-C) = 31,581 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 23.70% % unaccounted for loss

30 Days in A Month

Gallons / Day Loss = 1,052,700 gallons/day

Gallons / Min Loss = 731 gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company:

MOUNTAIN WATER DISTRICT

For the Month of:

OCTOBER

2013

Water Produced this Month:	76076	gallons*
Water Purchased this Month:	62852	gallons*

A: Total Water Produced and Purchased = 138,928 gallons*

Sold:	Residential	56923	gallons*
	Commercial	8296	gallons*
	Industrial	553	gallons*
	Multi-User	2181	gallons*
	Public Authority	9867	gallons*
	Water Salesman	0	gallons*

Total Sold = 77,820 gallons*

B: Difference: (Produced + Purchased)- Sold = 61,108 gallons*

%Difference = 43.99% % total water loss

Gallons of Water Accounted For:

Breaks (Estimated Total)	2303	gallons*
Hydrant Flushing	8232	gallons*
Storage Tank Overflow	1100	gallons*
Water Treatment Plant Use	1320	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	5605	gallons*
Net Computer Adjustment +/-	1518	gallons*
Other	88	gallons*

C: Total Gallons Accounted For = 20,166 gallons*

Loss: Unaccounted-for Water: (B-C) = 40,942 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 29.47% % unaccounted for loss

	31	Days in A Month
Gallons / Day Loss =	1,320,710	gallons/day
Gallons / Min Loss =	917	gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company: MOUNTAIN WATER DISTRICT

For the Month of: NOVEMBER 2013

Water Produced this Month: 78490 gallons*

Water Purchased this Month: 55683 gallons*

A: Total Water Produced and Purchased = 134,173 gallons*

Sold:	Residential	57368	gallons*
	Commercial	7792	gallons*
	Industrial	625	gallons*
	Multi-User	2978	gallons*
	Public Authority	8740	gallons*
	Water Salesman	0	gallons*

Total Sold = 77,503 gallons*

B: Difference: (Produced + Purchased)- Sold = 56,670 gallons*

%Difference = 42.24% % total water loss

Gallons of Water Accounted For:

Breaks (Estimated Total)	3295	gallons*
Hydrant Flushing	8233	gallons*
Storage Tank Overflow	0	gallons*
Water Treatment Plant Use	1071	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	6056	gallons*
Net Computer Adjustment +/-	1109	gallons*
Other	71	gallons*

C: Total Gallons Accounted For = 19,835 gallons*

Loss: Unaccounted-for Water: (B-C) = 36,835 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 27.45% % unaccounted for loss

	30	Days in A Month
Gallons / Day Loss =	1,227,833	gallons/day
Gallons / Min Loss =	853	gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company: MOUNTAIN WATER DISTRICT

For the Month of: DECEMBER 2013

Water Produced this Month: 79175 gallons*
 Water Purchased this Month: 69972 gallons*

A: Total Water Produced and Purchased = 149,147 gallons*

Sold:	Residential	55013	gallons*
	Commercial	7816	gallons*
	Industrial	505	gallons*
	Multi-User	2640	gallons*
	Public Authority	8462	gallons*
	Water Salesman	0	gallons*

Total Sold = 74,436 gallons*

B: Difference: (Produced + Purchased)- Sold = 74,711 gallons*

%Difference = 50.09% % total water loss

Gallons of Water Accounted For:

Breaks (Estimated Total)	1665	gallons*
Hydrant Flushing	8347	gallons*
Storage Tank Overflow	650	gallons*
Water Treatment Plant Use	974	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	5807	gallons*
Net Computer Adjustment +/-	1785	gallons*
Other	857	gallons*

C: Total Gallons Accounted For = 20,085 gallons*

Loss: Unaccounted-for Water: (B-C) = 54,626 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 36.63% % unaccounted for loss

	31	Days in A Month
Gallons / Day Loss =	1,762,129	gallons/day
Gallons / Min Loss =	1,224	gallons/min.

* 1 Unit = 1,000 gallons
 ** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company: MOUNTAIN WATER DISTRICT

For the Month of: JANUARY 2014

Water Produced this Month: 80991 gallons*

Water Purchased this Month: 84077 gallons*

A: Total Water Produced and Purchased = 165,068 gallons*

Sold:	Residential	67713	gallons*
	Commercial	9029	gallons*
	Industrial	563	gallons*
	Multi-User	3020	gallons*
	Public Authority	10029	gallons*
	Water Salesman	0	gallons*

Total Sold = 90,354 gallons*

B: Difference: (Produced + Purchased)- Sold = 74,714 gallons*

%Difference = 45.26% % total water loss

Gallons of Water Accounted For:

Breaks (Estimated Total)	3018	gallons*
Hydrant Flushing	9846	gallons*
Storage Tank Overflow	0	gallons*
Water Treatment Plant Use	1096	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	7048	gallons*
Net Computer Adjustment +/-	2634	gallons*
Other	940	gallons*

C: Total Gallons Accounted For = 24,582 gallons*

Loss: Unaccounted-for Water: (B-C) = 50,132 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 30.37% % unaccounted for loss

	31	Days in A Month
Gallons / Day Loss =	1,617,161	gallons/day
Gallons / Min Loss =	1,123	gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company: MOUNTAIN WATER DISTRICT

For the Month of: FEBRUARY 2014

Water Produced this Month: 73749 gallons*

Water Purchased this Month: 66408 gallons*

A: Total Water Produced and Purchased = 140,157 gallons*

Sold:	Residential	67091	gallons*
	Commercial	8566	gallons*
	Industrial	676	gallons*
	Multi-User	2587	gallons*
	Public Authority	7935	gallons*
	Water Salesman	0	gallons*

Total Sold = 86,855 gallons*

B: Difference: (Produced + Purchased)- Sold = 53,302 gallons*

%Difference = 38.03% % total water loss

Gallons of Water Accounted For:

Breaks (Estimated Total)	1523	gallons*
Hydrant Flushing	10350	gallons*
Storage Tank Overflow	0	gallons*
Water Treatment Plant Use	1004	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	6775	gallons*
Net Computer Adjustment +/-	3824	gallons*
Other	1062	gallons*

C: Total Gallons Accounted For = 24,538 gallons*

Loss: Unaccounted-for Water: (B-C) = 28,764 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 20.52% % unaccounted for loss

	28	Days in A Month
Gallons / Day Loss =	1,027,286	gallons/day
Gallons / Min Loss =	713	gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company: MOUNTAIN WATER DISTRICT

For the Month of: MARCH 2014

Water Produced this Month: 84558 gallons*

Water Purchased this Month: 56354 gallons*

A: Total Water Produced and Purchased = 140,912 gallons*

Sold:	Residential	56901	gallons*
	Commercial	6019	gallons*
	Industrial	0	gallons*
	Multi-User	2095	gallons*
	Public Authority	9519	gallons*
	Water Salesman	0	gallons*

Total Sold = 74,534 gallons*

B: Difference: (Produced + Purchased)- Sold = 66,378 gallons*

%Difference = 47.11% % total water loss

Gallons of Water Accounted For:

Breaks (Estimated Total)	2757	gallons*
Hydrant Flushing	8173	gallons*
Storage Tank Overflow	0	gallons*
Water Treatment Plant Use	1224	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	5831	gallons*
Net Computer Adjustment +/-	5775	gallons*
Other	296	gallons*

C: Total Gallons Accounted For = 24,056 gallons*

Loss: Unaccounted-for Water: (B-C) = 42,322 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 30.03% % unaccounted for loss

	31	Days in A Month
Gallons / Day Loss =	1,365,226	gallons/day
Gallons / Min Loss =	948	gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company: MOUNTAIN WATER DISTRICT

For the Month of: APRIL 2014

Water Produced this Month: 80194 gallons*

Water Purchased this Month: 35384 gallons*

A: Total Water Produced and Purchased = 115,578 gallons*

Sold:	Residential	57301	gallons*
	Commercial	5875	gallons*
	Industrial	774	gallons*
	Multi-User	2103	gallons*
	Public Authority	9664	gallons*
	Water Salesman	0	gallons*

Total Sold = 75,717 gallons*

B: Difference: (Produced + Purchased)- Sold = 39,861 gallons*

%Difference = 34.49% % *total water loss*

Gallons of Water Accounted For:

Breaks (Estimated Total)	84	gallons*
Hydrant Flushing	8323	gallons*
Storage Tank Overflow	0	gallons*
Water Treatment Plant Use	1123	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	5461	gallons*
Net Computer Adjustment +/-	2091	gallons*
Other	63	gallons*

C: Total Gallons Accounted For = 17,145 gallons*

Loss: Unaccounted-for Water: (B-C) = 22,716 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 19.65% % unaccounted for loss

	30	Days in A Month
Gallons / Day Loss =	757,200	gallons/day
Gallons / Min Loss =	526	gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company:

MOUNTAIN WATER DISTRICT

For the Month of:

MAY

2014

Water Produced this Month:	83273	gallons*
Water Purchased this Month:	64430	gallons*

A: Total Water Produced and Purchased = 147,703 gallons*

Sold:	Residential	59233	gallons*
	Commercial	6095	gallons*
	Industrial	440	gallons*
	Multi-User	2145	gallons*
	Public Authority	10570	gallons*
	Water Salesman	0	gallons*

Total Sold = 78,483 gallons*

B: Difference: (Produced + Purchased)- Sold = 69,220 gallons*

%Difference = 46.86% % total water loss

Gallons of Water Accounted For:

Breaks (Estimated Total)	641	gallons*
Hydrant Flushing	7778	gallons*
Storage Tank Overflow	0	gallons*
Water Treatment Plant Use	1056	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	6170	gallons*
Net Computer Adjustment +/-	1438	gallons*
Other	710	gallons*

C: Total Gallons Accounted For = 17,793 gallons*

Loss: Unaccounted-for Water: (B-C) = 51,427 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 34.82% % unaccounted for loss

	31	Days in A Month
Gallons / Day Loss =	1,658,935	gallons/day
Gallons / Min Loss =	1,152	gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Monthly Water Loss Report

Water Company:

MOUNTAIN WATER DISTRICT

For the Month of:

JUNE

2014

Water Produced this Month:	80918	gallons*
Water Purchased this Month:	55387	gallons*

A: Total Water Produced and Purchased = 136,305 gallons*

Sold:	Residential	62883	gallons*
	Commercial	6350	gallons*
	Industrial	712	gallons*
	Multi-User	2517	gallons*
	Public Authority	12136	gallons*
	Water Salesman	0	gallons*

Total Sold = 84,598 gallons*

B: Difference: (Produced + Purchased)- Sold = 51,707 gallons*

%Difference = 37.93% % total water loss

Gallons of Water Accounted For:

Breaks (Estimated Total)	6339	gallons*
Hydrant Flushing	8215	gallons*
Storage Tank Overflow	0	gallons*
Water Treatment Plant Use	1320	gallons*
Wastewater Treatment Plant Use**	0	gallons*
Fire Department Use	6599	gallons*
Net Computer Adjustment +/-	530	gallons*
Other	1455	gallons*

C: Total Gallons Accounted For = 24,458 gallons*

Loss: Unaccounted-for Water: (B-C) = 27,249 gallons*

% Loss: Unaccounted-for Water: (B-C)/A%= 19.99% % unaccounted for loss

	30	Days in A Month
Gallons / Day Loss =	908,300	gallons/day
Gallons / Min Loss =	631	gallons/min.

* 1 Unit = 1,000 gallons

** Wastewater Treatment Plant water usage is metered

Case: Mountain Water District
Case No: 2014-00342
RE: PSC Clarification Data Request

Original Response – PSC Third Data Request

Q 15 In each of the calendar years 2010 through 2013, Mountain District's reported line loss has exceeded 30 percent. 807 KAR 5:066, Section 6(3), states:

Except for purchased water rate adjustments for water districts and water associations, and rate adjustments pursuant to KRS 278.023(4), for rate making 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.

Q 15(a) Provide a detailed explanation as to why UMG's contract fee should not be adjusted to reflect the elimination of water costs that are in excess of the allowable 15-percent limitation.

WITNESS: Potter / Sawyers

RESPONSE: UMG, LLC is contractually obligated to pay for all water purchased to serve the District's customers during the normal course of daily operations and costs associated with water production. UMG's contract fee cannot be adjusted for water loss as there is no provision in the contract for an adjustment. UMG acquired operation responsibilities for a system that more than exceeded the recommended fifteen percent (15%) total water loss. UMG's contract fees should not be adjusted nor penalized for inheriting a pre-existing condition. Mountain Water District operates a complex system with a vast amount of infrastructure do to the following; Pike County in size is the largest county in the state; population density is sparse in nature; the mountainous terrain negatively affects the overall design of its system and facilities by implementation of additional infrastructure and equipment to maintain and operate; the replacement of aging infrastructure; upgrades necessary to meet the ever changing environmental regulations. These issues are a direct reflection of the current conditions of the water loss. The Division of Water recommended the District to provide adequate reinvestment for distribution infrastructure to reduce water loss in their 2013 Water Sanitary Survey. Please see attached 2013 Water Sanitary Survey noted as Exhibit 15(a).

Q 15(b) Given that the burden of proof is on Mountain District to show that an alternate level of unaccounted-for water loss is more reasonable, provide a proposal for an alternate level, and provide evidence to support Mountain District's proposal.

WITNESS: Potter / Sawyers

RESPONSE: The District would propose an alternative level; a goal to trim the current amount of water loss to twenty five percent (25%) in five (5) years; and twenty percent (20%) in five (5) years thereafter; however the District at this time can provide no hard evidence to support this goal. Until the District is able to locate additional funding resources; the inability to repair and replace aging infrastructure will continue being the contributing factor for water loss.

Case: Mountain Water District
Case No: 2014-00342
RE: PSC Clarification Data Request

Clarification Response – PSC Third Data Request

Q 15(b)

Witness: Potter / Sawyers

REVISED RESPONSE:

Mountain Water District was established by the combination of four utility districts. The District is unsure of the condition of the facilities it inherited or the previous practice and procedures of installation, repairs, and routine maintenance performed by those districts. There could be a multitude of reasons to factor in regarding water loss or failure of infrastructure; such as climate; soil corrosion; installation and maintenance practices; and theft of service.

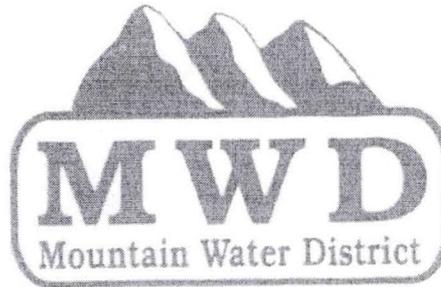
Mountain Water District operates a complex system with a vast amount of infrastructure do to the following; Pike County in size is the largest county in the state (you could travel to locations that would take an hour to an hour and half to drive); population density is sparse in nature; the mountainous terrain negatively affects the overall design of its system and facilities by implementation of additional infrastructure and equipment to maintain and operate; the replacement of aging infrastructure; upgrades necessary to meet the ever changing environmental regulations. These issues are a direct reflection of the current conditions of the water loss.

The District has maintained a Water Loss Program since its inception. This program assists in day to day operations to protect the District from major water loss. This program utilizes a leak detection crew, monitors master meters, performs accuracy testing on residential and commercial meters to be compliant, monitors troubled areas for leaks, has a service line replacement program when it necessitates, etc. Please find attached the Water Loss Program Manual as Revised Exhibit 15(b); the Master Meter Stations List as Revised Exhibit 15(b)(1); the Meter Testing Results as 15(b)(2).

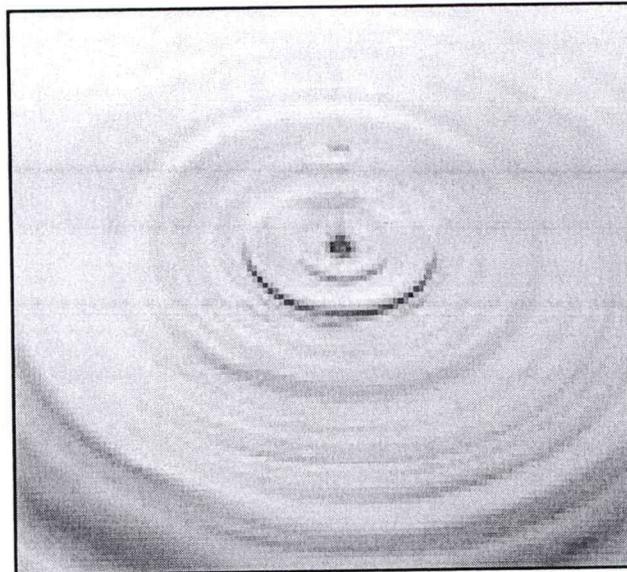
The District would propose a goal to trim the current amount of water loss to twenty five percent (25%) in five (5) years; and twenty percent (20%) in five (5) years thereafter. The District anticipates achieving this goal by proposing an infrastructure replacement program. The District currently identifies and ranks locations that have the most issues regarding water loss. The District will evaluate and prioritize those areas and begin replacement of its infrastructure to achieve the proposed water loss percentages; however until the District is able to locate additional funding resources; the inability to repair and replace failing or aging infrastructure will continue being the contributing factor for water loss. Please see attached Water Line Replacement List as Exhibit 15(b)(3).

EXHIBIT

15



WATER LOSS CONTROL PROGRAM



Mountain Water District
P.O. Box 3157
Pikeville, Ky. 41502

December 2005

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Mountain Water District

WATER LOSS CONTROL PROGRAM

INTRODUCTION

Conservation of resources has become a priority in the last decade as we realize that natural resources are finite and pollution of these resources can be disastrous for our future and future generations. With that in mind, Mountain Water District is becoming more aware of the necessity to become proactive in the conservation of water resources. Water loss reduction is two-fold. As water loss decreases, conservation and water supply is increased and local community involvement in conservation increases when they see their water utility participating in the conservation process.

Accounting audits simply confirm and compile information on the water utility as a whole. However, with rising costs and the general public becoming more concerned and informed about water availability and conservation efforts, the Mountain Water District is becoming more aware of the need to minimize water loss. Water audits are a necessary part of the conservation process.

The water loss control program in this program (curriculum??) is based on the International Water Association's (IWA) proven methodology which has been used all over the world and more recently in the United States. This methodology implements new terminology that will need to be thoroughly understood: corrected input volume, authorized consumption, apparent loss and real loss.

As Mountain Water District learns and implements the methods that are proven to minimize water loss, we will begin to view water loss with a new understanding. This water loss control program is the methodology we use at the Mountain Water District to control our water loss as we strive to become better at water conservation and public service.

WATER AUDIT

The general term "water loss" is now broken down into two separate categories enabling the Mountain Water District to distinguish between distribution loss (real loss) and meter inaccuracies and theft (apparent loss). This is accomplished by first auditing the system by the use of daily master meter readings, compiling monthly information on fire department and other authorized usage, work order information on system flushing and tank overflows, as well as system wide loss from water line leaks and breaks. This information is used to complete a field audit of any problematic areas of concern that may be revealed during the system wide water audit.

DEFINITION OF TERMS

Own Water – Water that has come from a utility's own sources, such as well fields, water rights, or a reservoir.

Purchased Water – Water that has been purchased or bought from another entity.

Input Volume/Water Delivery – All the water that is purchased, owned, or obtained by interconnects (water imported).

Water Supplied – Defined as system input volume minus water exported.

Water Exported – Water that is transferred out of the system to a buyer where revenue is received.

Master Meter Accuracy – Obtained by calibrating master meters. The utility checks the accuracy of the master meters, and then either adds or subtracts this number, depending on whether the meter was under or over-registering, from system input volume to determine the amount of water that was actually put into the distribution system.

Corrected Input Volume – The sum of Master Meter Accuracy and System Input Volume is the amount of water that was actually put into the system.

Authorized Consumption - Consists of four sub-categories that include all authorized water use:

1. **Billed Metered** - The water that has been sold and for which compensation from customers has been received.
2. **Billed Unmetered** - For all uses that have not been metered but compensation is received.
3. **Unbilled Metered** - For all uses that have been metered and no compensation is received (used for treatment plant, line and hydrant flushing.)

- 4. Unbilled Unmetered** - All uses that are unmetered and no compensation is received (line and hydrant flushing or any other uses that are authorized but unbilled and unmetered.)

Water Loss - Comprised of apparent loss and real loss. Corrected Input Volume minus Authorized Consumption equals Total Water loss.

Apparent Loss - Consists of accounting errors, inaccurate customer meters, illegal connections, and bypassed meters. Because this water was available for sale, these losses are incurred at the retail rate.

Real Loss - Consists of all types of leaks, bursts, and storage tank overflows that occur before the customer's meter. Because this water did not have the opportunity to pass through a customer's meter, these losses are incurred at the production rate.

Revenue Water - All water consumption that requires revenue collection: Water Exported plus Billed Authorized Consumption.

Non-Revenue Water - Water that is not billed and revenue is not received. This is equal to Unbilled Authorized Consumption plus Apparent Losses plus Real Losses.

METHODOLOGY

In accounting terms, an audit is defined as confirming and compiling information gathered on the entity as a whole. The utility is merely verifying that all the data being gathered is the most valid data possible. With this methodology, utility operations are broken down into numerous categories with questions that should verify the data validity.

System Input Volume

The total water supplied to the infrastructure is the System Input Volume. System Input Volume includes: purchased surface or ground water, the water obtained through interconnects, or water obtained from other sources.

Master Meter Accuracy

This is the verification or the calibration of master meters to ensure their accuracy. Once the accuracy level has been verified, the percentage of accuracy is documented. Adding this number to the uncorrected meter volume will provide the corrected input volume - the volume that was actually pumped into the distribution system.

Corrected Input Volume

This is simply the sum of either adding or subtracting the master meter adjustment to input volume. This is all the water that is actually in the distribution system and available to sell.

Authorized Consumption

This category consists of all water that have been authorized for use or consumption. Authorized consumption includes the following sub-categories:

Revenue Water

1. **Billed Metered** - Customer accounts whose meters are read and who are billed appropriately each month. Since this category determines revenue, these meters are most important regarding accuracy. All connections should be metered and on the current billing cycle. A program allowing for all construction/landscaping companies to rent a meter can be implemented, resulting in obtaining revenue for the water and add an additional revenue source.
2. **Billed Unmetered** - Requires submittal of a form documenting the amount of water used during the month.
3. **Water Exported** - Water that has been authorized for use by another utility or water provider for which revenue or compensation is received.

Non-Revenue Water

4. **Unbilled Metered** - This category could contain city/government offices, facilities and uses. Even if utility offices are not billed, they should have a meter for determining water use. Fire department use and line flushing should also be included. Fire departments should have a form to track usage that would require documentation of how many times the trucks were filled each month. (See WATER FOR FIRE FIGHTING AND TRAINING Form).
5. **Unbilled Unmetered** - Unmetered line flushing estimations are entered in this category (See FLUSHING SCHEDULE Form).

It is important to remember that in order to locate leaks or usage, the consumption of each connection should be metered.

Water Losses

This is the difference between Corrected Input Volume and Authorized Consumption. This consists of two major sub-categories: real losses and apparent losses. Both are considered types of water loss. Real losses are figured at the marginal production cost of water. Apparent loss is figured at the retail rate, because its loss is after the customer meter.

1. **Real Losses** - These losses are measured from the pressurized point up to the point of measurement of the customer usage. These are physical losses from the infrastructure, mains, valves, service lines and main lines. There are many reasons for leaks: improper installation, material or line failure and outside forces. All of these contribute to line loss. With proper system management, they can be kept to a minimum.
2. **Apparent Losses** - These losses occur when potential revenue water is removed from the system either through theft, meter inaccuracy, or billing procedures that prevent all water from being included in the water loss calculation.

THE ROLE OF METERING IN WATER LOSS DETECTION

Master Meters

Master meters are installed throughout the system to record the flow of the pressure zones it feeds. The pressure zones are broken up individually, and in these zones a customer count and billing is generated. This information is reviewed monthly, and converted to a daily average, to more effectively compare data with daily master meter readings. When deviations from the norm are found, any discrepancies are investigated.

Residential Meters

Residential meters, record management and theft are the three sub-categories that make-up the category of Apparent Loss. Apparent Loss is a volume of water that is associated with the utility's retail rate, because a utility would have received compensation for the water had it been recorded. Meters are cash registers, and it is in the best interest of the utility to implement programs that are designed to maximize the efficiency of these meters.

Depending on water chemistry and customer use patterns, residential meters may need to be replaced when they "roll over" or when they reach 8 to 10 years old. Meter replacement programs can be implemented by reviewing each meter's age throughout the utility, replacing the oldest first. After this program is implemented, it may take time to see revenue increases and/or water loss volumes diminish.

Proper meter selection begins with knowing the authorized water use of each end user. Large subdivision builders will often hire subcontractors to install meters and the final inspection is then conducted by the managing utility. However, after the homeowner occupies the residence, the initial meter application may change. The homeowner may install irrigation systems that exceed the limits of the current 5/8" meter. This new application now causes the meter to inaccurately register an unknown percentage of water. The majority of residential meters will read predominantly in the customer's favor, which can result in lost revenue for the district. The district needs to know the operating limits of each type of meter being used within the system so that the correct meter can be installed for each application. The cost to initiate and maintain a meter replacement program is outweighed by the benefits of initiating such a program.

Record Management and Billing

This is the second sub-category within Apparent Loss. The information obtained from the district's meter and billing system is vital to many parts of its operation. Peak summer demand, changes in water use patterns, rate design, design information, and system stability all depend on accurate and current records. Good data management, including metered uses and billing records, provide record of the district's past performance and future potential revenue.

Accounting errors can present challenges for the district. Examples of these challenges include: non-billing or accounting of every connection; data incorrectly transferred on meter readings; and customer water usage data being altered during the billing cycle. A prime example is when the district changes the amount billed or waives a portion of the water used due to a leak or some reason. Mountain Water District always accounts for water usage even in customer adjustments. Where within the billing records did the unbilled water go? Even though the billing department chose to waive the volume of water for customer satisfaction, follow the volume through the billing program to ensure that it does not become a real loss or the volume is not lost altogether. It is considered an apparent loss because the meter did record the volume of water.

Theft of Service

This is the third sub-category of Apparent Loss. It is considered Apparent Loss because it was in the distribution system ready to sell. However, it was taken before the water had an opportunity to go through a meter and generate revenue. Theft of water can occur by construction companies tapping into fire hydrants, and/or unauthorized connections by residential customers.

Meters, record management and theft of service are all part of Apparent Loss. They all consist of accurate measurement of a loss and recorded so that the utility would have received compensation. Since the loss of this water occurred at or after the customers meter it will have a retail cost associated to it.

Main Line Leaks, Service Line Leaks and Storage Tank Overflows

These are sub-categories within Real Loss and because the water did not go through a customer meter, the lost volume is associated with a production cost. Except for storage tank overflows, these sub categories are generally expensive and time consuming due to the difficulty in locating and repairing the leaks. They are considered real loss, because, as previously discussed, real loss is all the water that went through the master/source meters but has not gone through a customer's meter. Since this is "produced" water, it is calculated at a production rate. In order to more accurately track hydrant flushing, the district uses a diffuser with a pressure gauge that measure flow by pressure.

METHODS TO LOCATE AND MINIMIZE WATER LOSS

This section shows how the district utilizes several water loss techniques to locate loss within the system and conduct a bottom up audit. As discussed earlier, this type of audit is verifying that the data used is the most accurate and current possible. Bottom up audits are the next step for the district wanting to achieve a higher level of efficiency. They highlight issues within the utility that are preventing the utility from effective loss control. In performing the audit, billing procedures, maintenance costs and productivity levels can be reviewed. With time, financial rewards will be realized, along with substantiated water savings, essentially eliminating the need to look for more water.

System Investigation

System investigation requires extensive knowledge of the utility's infrastructure; therefore appropriate staff are chosen to conduct this study. Items that are studied include, but are not limited to:

1. Types of storage tanks and stand pipes.
2. Is there an interconnect with another utility? Make sure they have properly installed check valves.
3. Is the district aware of the location of all valves?
4. Does the same booster pump come on first every time? Equipment longevity can be extended if a different pump starts each time.
5. Is the utility implementing the use of forms for the fire department, line flushing form and the leak repair summary report?
6. What type of pipe is in the ground (i.e. PVC or iron)? Note the size of each. This information can be applied to the pin maps.
7. Are all meters the right size for each particular connection?
8. Residential meters are 5/8 x 3/4 inch. Are they installed correctly?
9. If they are close to reaching their operational limits, has their flow accuracy been tested and meter sized correctly?
10. The entire field staff know the system thoroughly.

Meters should have check valves and/or backflow prevention devices. These will prevent household water from re-entering the utility's main lines. Meters allow water to flow in the opposite direction. Due to pressure differences between the outside plumbing and inside plumbing, lawn and garden chemicals from a hose-end sprayer could enter the house plumbing if anti-siphon devices are not used on the outside faucets.

EQUIPMENT USED IN LEAK DETECTION

Ultrasonic Flow Machine

Device used to measure GPM by calculating the speed of water between the transducers and the given parameters (pipe OD, ID – pipe type, etc.) provided by the Leak Detection Technician.

Aquascope Survey

This is a survey conducted by the Leak Detection Technician where the Aquascope is used to listen to each meter base, which is cross connected to the main in hopes of hearing a leak.

With all the pressure zones the Mountain Water District has, the Leak Detection Technician must know the pipe type of the service line and the main line. Ductile Iron pipe and copper service line conducts the sounds far better than PVC and Polyethylene. The Leak Detection Technician must also know all main line regulators and booster pumping stations that are in the surveyed area. The restrictions of main line regulator and BPS motor sounds simulate the acoustics of a leak.

SCADA – Telemetry

This method has proven to be one of the most helpful tools in our leak detection program. Currently, there are over 30 water storage tanks being monitored by SCADA, most of which are 100,000 gallon capacity or greater and each supplying other pressure zones. By synchronizing the BPS run times of all of the zones being tested and creating a static pressure zone, the Leak Detection Technician can measure the feet per hour drop of the water storage tank and then convert the feet per hour drop to GPM with this formula: Ht of Water Storage Tank ÷ Capacity to get gallons per foot, GPF x Feet per hour average drop ÷ 60 to get GPM. During the hours of 1:00 a.m. to 4:00 a.m. is the general best time for night testing – (Lowest Usage)

Leak Detection and Repair

To be effective, leak detection and repair is a continuous program. Even as recordkeeping is improved and meters are being installed, tested and replaced, the district is aggressively involved in leak detection and line repairs. The LEAK DETECTION DAILY WORKSHEET is a useful document to aid in maintaining a successful leak detection program.

As the district implemented a leak detection program the first leaks located were the larger ones. The process is repeated in order to locate the smaller leaks that were not heard due to the background noise of the larger leaks.

Pressure Management

Excessive pressure exerted on the infrastructure can maximize wear and increase water consumption on the system as a whole.

Pressure Management implementation will;

- Reduce wear and tear on booster pumps and pressure relief valves (PRV)
- Lessen pressure exerted on infrastructure
- Lessen pressure on meters and customer's plumbing
- Reduce water consumption at customer side
- Reduce water loss through leaks in the system when lower pressure is used.

The volume of water being forced out of a leak at 200 psi is greater than at 65 psi. Higher pressures also exert more wear on a system, thereby conserving water when evenly lowering the pressure throughout the system.

Manual???

CONCLUSION

Leak detection, water loss prevention and awareness are key to the efficient conservation of resources in the water district. By utilizing water audits, leak detection equipment such as the aquascope ultra sonic flow meter, meter readings and accounting audits jointly, the goal of dramatically reducing water loss is achievable and necessary. By using the program outlined in this manual, it is possible to see impressive long-term results of water loss reduction and this represents a reduction in wasted resources. These are resources that the Mountain Water District spends money and man-hours to produce, thereby increasing efficiency, along with improving conservation of a precious natural resource.

EXHIBIT

15(B)1

**MOUNTAIN WATER DISTRICT
MASTER METER STATIONS
2014**

	MMS NO.	NAME / LOCATION	METER SIZE	METER TYPE
1	M-01JC	TOWN MOUNTAIN	6 INCH	COMPOUND
2	M-02JC	META	6 INCH	TURBO
3	M-03BC	BIG CREEK	6 INCH	TURBO
4	M-04CC	CHLOE CREEK	6 INCH	COMPOUND
5	M-05SV	INDIAN HILLS	4 INCH	TURBO
6	M-06IC	ISLAND CREEK	4 INCH	TURBO
7	M-07IC	RACCOON BRANCH	4 INCH	TURBO
8	M-08IC	HOOPWOOD HOLLOW	2 INCH	COMPOUND
9	M-09SX	SOOKEY CREEK #1	4 INCH	TURBO
10	M-10SV*	SOOKEY CREEK #2	6 INCH	TURBO
11	M-11EC	ELKHORN CREEK	4 INCH	TURBO
12	M-12CP	COWPEN	4 INCH	TURBO
13	M-13HC	HURRICANE CREEK (OUT OF ORDER)	4 INCH	TURBO
14	M-14MC	MARROWBONE WTP (OUT OF ORDER)	10 INCH	TURBO
15	M-15MC	MILLARD	6 INCH	TURBO
16	M-16PC	WILLIAMSON #1	10 INCH	TURBO
17	M-17PC	WILLIAMSON #2	6 INCH	COMPOUND
18	M-18IC	MODERN MOBILE HOME PARK	2 INCH	COMPOUND
19	M-18MC	GREASY CREEK	6 INCH	TURBO
20	M-19MC	FERRELLS CREEK	4 INCH	COMPOUND
21	M-20JC	BRUSHY CREEK	4 INCH	COMPOUND
22	M-21HC	CEDAR GAP	4 INCH	COMPOUND
23	M-22MC	ELKHORN CONNECTOR	6 INCH	COMPOUND
24	M-23JC	LOWER JOHNS CREEK	6 INCH	COMPOUND
25	M-24MC	RUSSELL FORK WTP	12 INCH	COMPOUND
26	M-25JC	MILLER'S CREEK	4 INCH	COMPOUND
27	M-26JC	LEFT JOE'S CREEK	2 INCH	TURBO
28	M-27MC	MARROWBONE	6 INCH	COMPOUND

* Denotes Telemetry Controls

EXHIBIT

15(B)2

**MOUNTAIN WATER DISTRICT
METER TESTING RESULTS
2009-2014**

	2009	2010	2011	2012	2013	2014
TOTAL METERS TESTED	1001	446	1064	960	601	995
TOTAL METERS > +/- 2%	17	9	21	28	10	25
PERCENTAGE > +/- 2%	1.70%	2.02%	1.97%	2.92%	1.66%	2.51%
TOTAL METERS WITHIN +/- 2%	984	437	1043	932	591	970
PERCENTAGE WITHIN +/- 2%	98.30%	97.98%	98.03%	97.08%	98.34%	97.49%

EXHIBIT

15(B)3

LINE REPLACEMENT
 1 TO 3 YEAR REPLACEMENT SCHEDULE
 2015-2018

LOCATION	EST. REPLACEMENT COST
DORTON	6" DI - 4,000 FT X \$28/FT = \$112,000 2 TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$118,000
BURNING FORK	4" DI - 2,500 FT X \$25/FT = \$62,500 RECONNECTION OF 20 SERVICES @ \$1,000 EA = \$20,000 2 TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$88,500
TAYLOR FORK	4" DI - 2,000 FT X \$25/FT = \$50,000 RECONNECTION OF 12 SERVICES @ \$1,000 EA = \$12,000 2 TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$68,000
ELKHORN	8" DI - 3,500 FT X \$32/FT = \$112,000 RECONNECTION OF 17 SERVICES @ \$1,000 EA = \$17,000 8 X 4 TIE-IN (THREE MILE) - \$3,000 8 X 3 TIE-IN (JOHN CABLE) - \$3,000 3 - 120 FT - OPEN CUT CASE FOR 8" DI @ \$175/FT = \$21,000 TOTAL = \$156,000
OLD BEEFHIDE ROAD	6" DI - 3,600 FT X \$28/FT = \$100,800 RECONNECTION OF 14 SERVICES @ \$1,000 EA = \$14,000 2 TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$120,800
COLLINS HIGHWAY	UPSTREAM/RIDDLES CROSSING 6" DI - 1,000 FT X \$28/FT = \$28,000 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$34,000 SHELBY YARD TO SHELBY BRIDGE 6" DI W/CREEK CROSSING - 1,000 FT X \$36/FT = \$36,000 RECONNECTION OF 2 SERVICES @ \$1,000 EA - \$2,000 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$44,000

LINE REPLACEMENT
1 TO 3 YEAR REPLACEMENT SCHEDULE
2015-2018

OASIS PAWN SHOP TO INDIAN HILLS	<p style="text-align: center;">8" DI - 1,000 FT X \$32/FT = \$32,000 1 - HYDRANT TIE-IN REPLACEMENT @ \$4,500 EA = \$4,500 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$42,500</p>
DORTON HILL	<p style="text-align: center;">2" SDR-17 - 2,200 FT @ \$18/FT = \$39,600 2 TIE-INS @ \$3,000 EA = \$6,000 RECONNECTION OF 3 SERVICES @ \$1,000 EA = \$3,000 TOTAL = \$48,600</p>
BOWLING FORK	<p style="text-align: center;">4" DI - 1,000 FT @ \$25/FT = \$25,000 RECONNECTION OF 4 SERVICES @ \$1,000 EA = \$4,000 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$35,000</p>
DEMOCRAT HOLLOW	<p style="text-align: center;">2" SDR-17 - 350 FT @ \$18/FT = \$6,300 RECONNECTION OF 3 SERVICES @ \$1,000 EA = \$3,000 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$12,300</p>
GREASY CREEK	<p style="text-align: center;">6" DI - 2,500 FT @ \$28 FT = \$70,000 RECONNECTION OF 12 SERVICES @ \$1,000 EA = \$12,000 1 - HYDRANT TIE-IN @ \$4,500 EA = \$4,500 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$92,500</p>
SMITH FORK OF PHELPS (.5 MILES UP)	<p style="text-align: center;">6" DI - 2,600 FT @ \$28 FT = \$72,800 RECONNECTION OF 14 SERVICES @ \$1,000 EA = \$14,000 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$92,800</p>

LINE REF EMENT
1 TO 3 YEAR REPLACEMENT SCHEDULE
2015-2018

ARNOLD MCCOY ROAD	10" CREEK CROSSING DIRECTIONAL BORE = \$15,000 TIE-INS @ \$4,500 EA = \$9,000 = \$24,000	2 TOTAL
TOTAL	\$953,000	

CASE: Mountain Water District
CASE NO: 2014-00342
RE: PSC Third Data Request
Request for Clarifications

Q 18 Refer to Mountain District's responses to Staff's Second Request, items 22 and 23. The burden is on Mountain District to show that UMG's contract fee is reasonable. Provide copies of any study or analysis that Mountain District has that supports its position that the UMG contract fee is reasonable.

WITNESS: Sawyers. Information provided by legal counsel.

RESPONSE Q18:

Mountain Water District does not have any study or analysis that supports its position that UMG's contract fee is reasonable.

REVISED RESPONSE:

MWD has prepared a comparative analysis with other Districts, which supports its position that UMG's contract fee is reasonable. UMG's contract fee represents most of MWD's operational expenses, and when MWD's operating expenses are compared with other Districts in the mountains of Eastern Kentucky, and with a like-size District, MWD's expenses compare favorably to the others, when you factor in the size and complexity of MWD.

Exhibit 18 (a) (b) charts other water district's operational expenses for water and sewer. While the numbers can be viewed in different ways, MWD believes the best way to compare those numbers is expense per customer, expense per mile of mainline and operating expenses as a percentage of plant. MWD's expenses are similar with other districts; however those systems are not comparable in the overall size of Mountain Water District. The District doesn't meet Division of Water or water industry standards regarding replacement of infrastructure; Division of Water recommends 100% percent reinvestment of depreciation.

MWD's water expense per customer is one of the lowest of the group and its revenue is the lowest. Expense per mile of main line is the lowest of the group. The only comparable expense is Hardin County, which is not in the

mountains. Lastly, expenses as a percentage of operating plant are in line with peers.

These expenses are in line despite the increased number of pump stations and tanks necessitated by the complexity of pumping water up and over the mountainous terrain. For example, you will note that the Martin County Water District has eleven (11) pumping stations for three thousand six hundred thirty-five customers. Hardin County #1 and #2 have a total of eleven (11) pumping stations for twenty seven thousand one hundred twenty five (27,125) customers combined. MWD has one hundred thirty five (135) pump stations for seventeen thousand one hundred forty five (17,145) customers. Clearly, the cost of providing water in the mountains is higher than other areas.

When you do a per customer analysis of sewer you can see our expenses are in line, but our revenue is woefully short. Our expenses per mile are high because of the complexity of our system. MWD has twenty (20) lift stations, which serve about twenty three hundred (2,300) customers. A gravity systems does not need to utilize any lift stations. All of these customers must have grinder pumps that are having to be replaced on average of every five (5) years.

The cost of rebuilding a pump ranges between \$350 to \$400, and MWD is spending about \$250,000 a year in rebuilding pumps. The expected lifetime would be no more than two (2) rebuilds, and the cost of replacing these pumps is approximately \$1,100.00

Operating expenses as a percentage of plant are also in line. The complexity of providing water and sewer services in the mountains is clearly more expensive than other areas of the state. MWD has the largest system in the mountains. However, despite its size and complexity, MWD's expenses are comparable with other systems.

In addition to comparing our expenses under the UMG contract, with other like-kind districts, we have also prepared an analysis (Exhibit 18 C), in which the District has determined how much it will cost to run the District independently, without a third-party contact for operations. This analysis was prepared by our CPA, Michael Spears. He has incorporated UMG's core expenses and we have adjusted those numbers as appropriate. His assumptions are noted in his Exhibit. These numbers reflect that on a cash operational basis we would be saving approximately \$374,565 if we operate independently. Based on these two analyses, UMG's contract fee is reasonable.

EXHIBIT

18(a)

REGIONAL WATER DISTRICT
 OPERATIONAL COMPARISON DATA
 AS OF YEAR END, DECEMBER 31, 2013

	MOUNTAIN WATER DISTRICT	MARTIN CO WATER DISTRICT	SOUTHERN WATER DISTRICT	KNOTT COUNTY WATER DISTRICT	HARDIN CO #1	HARDIN CO #2	MUHLENBERG COUNTY WATER DISTRICT #1
CUSTOMER COUNT	17,145	3,635	7,004	2,460	9,988	17,137	5938
WATER REVENUE	\$8,330,750.00	\$2,367,900.00	\$3,734,645.00	\$1,678,241.00	\$8,123,186.00	\$8,531,494.00	\$3,731,184.00
TOTAL PLANT	\$104,619,711.00	\$33,288,246.00	\$35,351,799.00	\$44,746,976.00	\$53,884,887.00	\$74,089,285.00	\$14,688,237.00
OPERATING EXPENSES	\$6,404,461.00	\$2,221,519.00	\$2,860,025.00	\$1,493,736.00	\$4,811,929.00	\$4,410,420.00	\$3,059,825.00
LINE LOSS %	30%	61%	41%	23%	42%	12%	20%
MILES OF MAIN	1010	200	154	90	438	656	72
# PUMP STATIONS	135	11	18	0	4	7	2
# TANKS	108	12	26	N/A ***	13	11	4
EXPENSE PER CUSTOMER	\$374	\$611	\$408	\$607	\$482	\$257	\$515
EXPENSE PER MILE OF LINE	\$6,341	\$11,108	\$18,572	\$16,690	\$10,986	\$6,723	\$42,498
REVENUE PER CUSTOMER	\$486	\$651	\$533	\$682	\$813	\$498	\$628
OP. EXP. AS % OF PLANT	6.12%	6.67%	8.09%	3.34%	8.93%	5.95%	21.00%

* Please note: Miles of main and line loss % have been rounded to the nearest whole number.

** All information was obtained from the PSC Annual Report for each system for the year ended December 31, 2013.

*** No tank information listed on PSC Annual Report

EXHIBIT

18(b)

REGIONAL WATER DISTRICT
 OPERATIONAL COMPARISON DATA - SEWER
 AS OF YEAR END, DECEMBER 31, 2013

	MOUNTAIN WATER DISTRICT	SOUTHERN WATER DISTRICT	HARDIN CO #1	KNOTT COUNTY WATER DISTRICT	POWELL'S VALLEY WATER DISTRICT	TROUBLESOME CREEK ENV. AUTHORITY
CUSTOMER COUNT	2,372	342	8,817	131	108	28
SEWER REVENUE	\$917,414.00	\$162,868.00	\$6,139,781.00	\$63,639.20	\$84,449.00	\$3,393.06
TOTAL PLANT	\$28,179,798.00	\$7,844,514.00	\$117,088,563.00	\$340,489.02	\$971,923.00	\$4,838,561.35
OPERATING EXPENSES	\$1,241,268.00	\$128,835.00	\$4,719,597.00	\$46,929.36	\$54,882.00	\$103,248.92
# WWTPs	10	4	95	1	3	1
MILES OF SEWER LINE	50.77	7.3	227.25	3.88	N/A ***	6.08
EXPENSE PER MILE OF LINE	\$ 24,448.85	\$ 17,648.63	\$ 20,768.30	\$ 12,095.20	***	\$ 16,981.73
EXPENSE PER CUSTOMER	\$523	\$377	\$535	\$358	\$508	\$3,687
REVENUE PER CUSTOMER	\$387	\$476	\$696	\$486	\$782	\$121
OP. EXP. AS % OF PLANT	4.40%	1.64%	4.03%	13.78%	5.65%	2.13%

** All information was obtained from the PSC Annual Report for each system for the year ended December 31, 2013.

** No length of line was included in PSC Annual Report for this utility.

EXHIBIT

18(c)

Mountain Water District

Projected Cost Comparison of Assuming Operations of the District for the Year Ending December 31, 2014

	UMG Direct Expenses	MWD Additional	MWD Projected Cost
Payroll and Administrative Expenses			
Salary and Wages			\$ 1,609,414
Regular Pay	\$ 1,609,414		85,925
Overtime	85,925		222,271
Paid leave	222,271		113,881 (1)
HR, Safety, AP Clerk	-	113,881	-
Total Salaries and Wages	<u>\$ 1,917,610</u>		<u>\$ 2,031,491</u>
Payroll Taxes			176,224
Fica	141,479	8,712 (2)	150,191
Futa	6,993	144 (2)	7,137
Suta	17,837	1,059 (2)	18,896
Total Payroll Taxes	166,309		404,456
Health Insurance Expense	375,656	28,800 (3)	7,905
Life Insurance Expense	7,462	443 (4)	7,114
Long Term Disability	6,715	399 (5)	346,572
State Retirement System	54,522	292,050 (6)	5,505
Training Expense	5,505		
Travel			4,931
Lodging	4,931		5,245
Meals	5,245		855
Mileage	855		-
Total Travel	<u>11,031</u>		<u>11,031</u>
Vehicle Expenses		30,000 (7)	99,306
Lease Expense	69,306		174,962
Gasoline	174,962		36,469
Diesel	36,469		2,057
Miscellaneous	2,057		-
Total Vehicle Expense	282,794		312,794
Office Storage Rental	1,090		1,090
Office Equipment Lease	7,253		7,253
Office Supplies	31,930		31,930
Janitorial Expense	20,092		20,092
Postage	111,210		111,210
Professional Fees accounting	749		749
Professional Fees Other	47,941		47,941
Insurance			149,073
General Liability	149,073		15,417
Auto	15,417		35,706
Workers Compensation	35,706		-
Total Insurance Expense	200,196		200,196
Telephone			11,736
Office	11,736		13,848
Mobile	13,848		1,910
Other	1,910		-
Total Telephone	27,494		27,494
Security Service	459		459
	<u>\$ 3,276,018</u>	<u>475,488</u>	<u>\$ 3,751,506</u>
Direct Operations			
Uniforms	26,497		26,497
Safety Supplies	16,274		16,274
Laboratory Supplies	2,979		2,979

Laboratory Testing	37,171		37,171
Other Outside Services	2,400		2,400
Carbon	802		802
Disinfectants	54,950		54,950
Fluoride	17,909		17,909
Polymers	8,313		8,313
Dechlorination Agents	13,841		13,841
Nitonox	11,270		11,270
Other Chemicals	62,977		62,977
Purchased Water	1,114,659		1,114,659
Electricity	1,162,650		1,162,650
Sewage Fees	163,514		163,514
Solid Waste	6,805		6,805
	<u>2,703,011</u>	<u>-</u>	<u>2,703,011</u>
Repair and Maintenance			
Repair and Maintenance	758,439		758,439
Hand Toos	13,316		13,316
	<u>771,755</u>	<u>-</u>	<u>771,755</u>
	<u>\$ 6,750,784</u>	<u>475,488</u>	<u>\$ 7,226,272</u>
Amount Paid to UMG			<u>7,600,837</u>
Projected Saving by Operating the District Internally			<u>\$ 374,565</u>

Mountain Water District

Projected Cost Comparison of Assuming Operations of the District Assumptions June 30, 2014

Number

- 1 The district will require 3 additional employees included in UMG's Corporate Overhead Number HR Specialist at \$39,833, Safety Director at \$39,179, and A/P Clerk at \$34,869
- 2 The additional Fica is calculated at 7.65% of the Salary, FUTA at .006 of \$8,00 per Employee and SUTA at prorata to UMG's cost related to total payroll
- 3 Cost estimated at \$800 per new employee multiplied by 12 months.
- 4 Pro rata UMG's number to their total payroll, adjusted for the 3 new employees
- 5 Pro rata UMG's number to their total payroll, adjusted for the 3 new employees
- 6 Total payroll of \$2,031,491 multiplied by the current KERS Retirement percentage of 17.06% less the UMG costs of \$54,522.
- 7 UMG currently uses 7 trucks of theirs on our project, we will only replace 5 of those. Estimated at \$500 per month by the five new trucks.

CASE: Mountain Water District
CASE NO: 2014-00342
RE: PSC Clarification Request

Q 20

Refer to the Application, Exhibit F, June 30, 2014 Pro forma Financial Statements and Accountants' Report, to Exhibit O-2, Water System Pro forma Adjustments to Historic Test Year, and to Exhibit B-5, Sewer System Pro forma Adjustments to Historic Test Year.

- a. In Case No. 2001-00211,⁴ the Commission made the following finding regarding the use of budgetary adjustments in a historical test-year rate case.

Where an applicant bases its application upon a historical test period, it must provide a "complete description and quantified explanation for all proposed adjustments with proper support for any proposed changes in price or activity levels, and any other factors which may affect the adjustment." That support should, at a minimum, include some documentary evidence to demonstrate the certainty of some expected change or event.⁵

Provide a detailed explanation as to how the following adjustments proposed by Mountain District would meet the requirement described in Case No. 2001-00211:

1. Kentucky Power Company submitted its rate case application on December 23, 2014.⁶ Mountain District proposes a 3 percent increase to electric expense to reflect the projected impact of this rate case. The date a Commission decision will be issued on this Kentucky Power Company's request is uncertain.
2. Mountain District entered into a tank painting and repair contract with Southern Corrosion that is currently on hold due to Mountain District's financial constraints. Mountain District states that "the contract is to be continued as soon as the cash flow will allow."

b. Why is the 3 percent Kentucky Power rate increase applied to the contract allowances for electric expense and not the actual electric cost incurred to operate Mountain District in the test year?

WITNESS: Howard

RESPONSE:

- a. 1) The Kentucky Power Company had a rate increase take effect January 1, 2015 and that is documented at the PSC. The lowest rate was 3%, which we used the bare minimum that we could possibly receive. As stated in the answer to (b) below, it is possible to calculate actual rates as stated below. By using the minimum 3%, we felt as though we were taking a conservative approach on the rate filing. There is certainty that 3% will be our lowest rate.

2) **Tank Painting and Repair Contract** is adjusted by \$334, 231, which is the annual payment on the Southern Corrosion contract which is currently on hold due to financial constraints as agreed upon. The contract was put on a temporary hold due to the financial situation of the District. At the time when a new rate is issued, the District needs to resume this contract and finish the vital repairs to the tanks to be able to continue to provide potable water to their customers. This amount is allocated to the Water Department and is measurable by virtue of the existing contract. This contract has already been started and is temporarily on hold via a contract amendment. In lieu of a breach of contract lawsuit concerning the same, Southern Corrosion and Mountain Water agreed to suspend the contract up to eighteen (18) months. See attached Exhibit 20 a(2).

- b. At the time of preparation of the cost of service study the AEP rate increase was anticipated. Now that we have entered calendar 2015 it is possible to compare rates per KWHR (and peak demand) for a more accurate estimate of electrical cost increase.

Revised Response:

Please see attached Excel File on CD.

CASE: Mountain Water District

CASE NO: 2014-00342

RE: PSC Clarification Data Request

Original Response – PSC Second Data Request

Q 24 Refer to the Application, Exhibit J, Mountain District's Depreciation Schedules for the water and sewer divisions.

- a. The depreciation schedule for the G/L Account Number for the sewer division is for the six-month period ending June 30, 2014. Provide a revised depreciation schedule for the sewer division for the full test year which Mountain District defines as July 1, 2013, to June 30, 2014.
- b. The depreciation schedule for the G/L Account Number for the water division is for the six-month period ending June 30, 2014. Provide a revised depreciation schedule for the water division for the full test year which Mountain District defines as July 1, 2013, to June 30, 2014.
- c. Provide the depreciation schedules submitted in the responses to Items 24(a) and 24(b) of this request in Microsoft Excel format.
- d. Provide justification for all service lives proposed for water and sewer assets.
- e. Explain why the GRW Hydraulic Study is depreciated over a three-year period.

- f. Refer to Water Assets, 1011-02, Pumping Equipment.
 1. Provide details of water asset numbers: 311-2041, 3112042, and 311-2044, and how they pertain to pumping equipment.
 2. Provide justification for use of a pressure relief valve's 40-year service life in asset number 331-2062.
 3. Explain the difference in life cycles for booster pumping stations such as assets 311-2077 (40 years) versus asset 311-9848 (five years).
 4. Explain asset 311-2009, plant electronics' 30-year life cycle.

- g. Refer to Water Assets, 1030-04 Distribution Reservoir/Stand.
 1. Explain the variation in life cycles from ten to 40 years for storage tank/stand pipe assets such as 330-4002, and 330-4024.
 2. Provide a narrative that describes "ONE CARD" assets and explain the variation in life cycles from seven to 40 years for "ONE CARD" assets 330-4058 and 330-4065.

3. Explain the 40-year life cycle of telemetry system asset 3304012.

WITNESS: Spears

RESPONSE:

- a. I cannot do a crossover period that corresponds to the test year as the fixed asset program does not have that capability. The approach I took was designated in the Fixed Assets Calculation which entailed taking the Dec. 31, 2013 balances and subtracting the June 30, 2013 balances to get the six months of depreciation and then ran the partial year June 30, 2014 and adding the two together. If the PSC so desires I can forward those periods for their review.
- b. I cannot do a crossover period that corresponds to the test year as the fixed asset program does not have that capability. The approach I took was designated in the Fixed Assets Calculation which entailed taking the Dec. 31, 2013 balances and subtracting the June 30, 2013 balances to get the six months of depreciation and then ran the partial year June 30, 2014 and adding the two together. If the PSC so desires I can forward those periods for their review.
- c. The program we use, "Fixed Asset Manager" by Pro Series does not have the capability of converting to Excel format.
- d. We have tried to use the PSC lives, however there are always mistakes that could be made with multiple people over the years entering the assets in the program.
- e. This was only 25% of the cost of the study and was done in 1998, I am not sure why the life was chosen. However there was no depreciation taken on this asset during the historic test year.
- f.
 1. These assets were added in 1995 and 1997, I take it that this was the allocation of pumping equipment as each of these appear to be projects that the pumping equipment was allocated from.
 2. This was an asset in 2000 and appears to have been an error in coding the useful life to the fixed asset program.
 3. It appears that the asset 311-9848 was parts capitalized to a pump station rather than an actual pump station, I came to this conclusion by the cost basis capitalized was only \$2,250.00.
 4. This was plant electronics put in place in 1981 which would have been put in place by one of the six districts that was consolidated into the current Mountain Water District. I have no idea as to why 30 years was used for the useful life.
- g.
 1. Asset 330-4002 was capitalized in 1983 and as stated in the answer to f. (4) above. I have no idea as to why in 1983 they chose a 10 year life and Asset 330-4024 was placed in service in 1989 again prior to the consolidation and it appears they chose 40 years as the asset life.
 2. One Cards are interface between the logic board and telemetry radios. The cards do not have a useful life of 40 years. I would assume that a 7 year life is more appropriate since technology changes.

3. This asset was placed in service in 1985 by one of the former six districts consolidated into the Mountain Water District. I am not sure why they chose 40 years as this seems extensive however that may have been the PSC regulations at that time.

Clarification Response – PSC Second Data Request

Q 24(d)

WITNESS: Spears

REVISED RESPONSE:

Mountain Water District considers the forty years being reasonable considering the fact of the shortfall of the existing infrastructure. Mountain Water District was established by the combination of four utility districts. The District is unsure of the condition of the facilities it inherited or the previous practice and procedures of installation, repairs, and routine maintenance performed by those districts. There could be a multitude of reasons to factor in regarding the life of service lines or failure of infrastructure; such as climate; soil corrosion; geological features; installation and maintenance practices. Please refer to Exhibit 20 for depreciation water assets and depreciation sewer assets.

Please see attached proposed water line replacement list as Exhibit 24(d) for locations that fall short of the life expectancy.

**LINE REPLACEMENT
1 TO 3 YEAR REPLACEMENT SCHEDULE
2015-2018**

OASIS PAWN SHOP TO INDIAN HILLS	1987	<p style="text-align: center;">8" DI - 1,000 FT X \$32/FT = \$32,000 1 - HYDRANT TIE-IN REPLACEMENT @ \$4,500 EA = \$4,500 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$42,500</p>
DORTON HILL	1991	<p style="text-align: center;">2" SDR-17 - 2,200 FT @ \$18/FT = \$39,600 2 TIE-INS @ \$3,000 EA = \$6,000 RECONNECTION OF 3 SERVICES @ \$1,000 EA = \$3,000 TOTAL = \$48,600</p>
BOWLING FORK	1971	<p style="text-align: center;">4" DI - 1,000 FT @ \$25/FT = \$25,000 RECONNECTION OF 4 SERVICES @ \$1,000 EA = \$4,000 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$35,000</p>
DEMOCRAT HOLLOW	1971	<p style="text-align: center;">2" SDR-17 - 350 FT @ \$18/FT = \$6,300 RECONNECTION OF 3 SERVICES @ \$1,000 EA = \$3,000 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$12,300</p>
GREASY CREEK	1992	<p style="text-align: center;">6" DI - 2,500 FT @ \$28 FT = \$70,000 RECONNECTION OF 12 SERVICES @ \$1,000 EA = \$12,000 1 - HYDRANT TIE-IN @ \$4,500 EA = \$4,500 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$92,500</p>
SMITH FORK OF PHELPS (.5 MILES UP)	1995	<p style="text-align: center;">6" DI - 2,600 FT @ \$28 FT = \$72,800 RECONNECTION OF 14 SERVICES @ \$1,000 EA = \$14,000 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$92,800</p>

EXHIBIT

24(d)

LINE REPLACEMENT
1 TO 3 YEAR REPLACEMENT SCHEDULE
2015-2018

LOCATION	CONSTRUCTION DATE	EST. REPLACEMENT COST
DORTON	1991	6" DI - 4,000 FT X \$28/FT = \$112,000 2 TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$118,000
BURNING FORK	1990	4" DI - 2,500 FT X \$25/FT = \$62,500 RECONNECTION OF 20 SERVICES @ \$1,000 EA = \$20,000 2 TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$88,500
TAYLOR FORK	1990	4" DI - 2,000 FT X \$25/FT = \$50,000 RECONNECTION OF 12 SERVICES @ \$1,000 EA = \$12,000 2 TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$68,000
ELKHORN	1995	8" DI - 3,500 FT X \$32/FT = \$112,000 RECONNECTION OF 17 SERVICES @ \$1,000 EA = \$17,000 8 X 4 TIE-IN (THREE MILE) - \$3,000 8 X 3 TIE-IN (JOHN CABLE) - \$3,000 3 - 120 FT - OPEN CUT CASE FOR 8" DI @ \$175/FT = \$21,000 TOTAL = \$156,000
OLD BEEFHIDE ROAD	1991	6" DI - 3,600 FT X \$28/FT = \$100,800 RECONNECTION OF 14 SERVICES @ \$1,000 EA = \$14,000 2 TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$120,800
COLLINS HIGHWAY	1983	UPSTREAM/RIDDLES CROSSING 6" DI - 1,000 FT X \$28/FT = \$28,000 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$34,000 SHELBY YARD TO SHELBY BRIDGE 6" DI W/CREEK CROSSING - 1,000 FT X \$36/FT = \$36,000 RECONNECTION OF 2 SERVICES @ \$1,000 EA = \$2,000 2 - TIE-INS @ \$3,000 EA = \$6,000 TOTAL = \$44,000

LINE REPLACEMENT
1 TO 3 YEAR REPLACEMENT SCHEDULE
2015-2018

ARNOLD MCCOY ROAD	1987	10" CREEK CROSSING DIRECTIONAL BORE = \$15,000 TIE-INS @ \$4,500 EA = \$9,000 = \$24,000	2 TOTAL
TOTAL			\$953,000