

Attachment

Garrison-Quincy-KY-O'Heights Water District

COST OF SERVICE STUDY

Allocation of Plant Value				
Garrison-Quincy-KY-O'Heights Water District				
	Total	Commodity	Demand	Customer
Land & Land Rights	\$3,576		\$3,576	
Structures and Improvements	48,666		48,666	
Reservoirs	47,943		47,943	
Wells and Springs	136,851		136,851	
Trasmission & Distribution Mains	2,317,588		2,317,588	
Meters & Meter Installation	119,646			119,646
Water Treatment Equipment	542,810		542,810	
Pumping Equipment	167,282		167,282	
Services	7,875			7,875
Hydrants	2,076			2,076
Subtotal	\$3,394,313		\$3,264,716	\$129,597
Allocation Percentages	100%		96.2%	3.8%
Office Furniture & Equipment	\$18,620		\$17,912	\$708
Transportation Equipment	71,517		68,799	2,718
Power Operaterd Equipment	51,201		49,255	1,946
Subtotal	\$141,338		\$135,967	\$5,371
Total	\$3,535,651		\$3,400,683	\$134,968
Source: PSC Annual Report 2006				

Allocation of Depreciation				
Garrison-Quincy-KY-O'Heights Water District				
	Total	Commodity	Demand	Customer
Structures & Improvements	\$19,657		\$19,657	
Reservoirs	15,848		15,848	
Wells and Springs	14,275		14,275	
Pumping Equipment	76,352		76,352	
Water Treatment Equipment	406,206		406,206	
Trasmission & Distribution Mains	391,562		391,562	
Meters	36,894			\$36,894
Hydrants	1,040			1,040
Services	4,175			4,175
Subtotal	\$966,009		\$923,900	\$42,109
Allocation Percentages	100%		95.6%	4.4%
Office Furniture & Equipment	\$14,174		\$13,550	\$624
Transportation Equipmetn	68,569		65,552	3,017
Tools, Shop & Garage Equip	43,657		41,736	1,921
Subtotal	\$126,400		\$120,838	\$5,562
Total	\$1,092,409		\$1,044,738	\$47,671
Source: PSC Annual Report 2006				

Allocation of Operation & Maintenance Expense				
Garrison-Quincy-KY-O'Heights Water District				
	Total	Commodity	Demand	Customer
Employee Salary Expense	\$71,149		\$41,953	\$29,196
Pension & Benefits	12,932		7,631	5,301
Purchased Water	27,187	\$27,187		
Purchased Power	17,441	17,441		
Chemicals	3,785	3,785		
Transportation Expense	4,119		4,119	
Bad Debt Expense	797			797
Subtotal	\$137,410	\$48,413	\$53,703	\$35,294
Less Commodity	(\$48,413)			
Total	\$88,997			
Allocation Percentages	100%		60%	40%
Salaries & Wages-Admin	\$29,806		\$17,884	\$11,922
Salaries & Wages-Officers	6,600		3,960	2,640
Pension & Benefits-Admin	5,411		3,247	2,164
Insurance	23,069		13,841	9,228
Contractual Services-Accounting	3,200		1,920	1,280
Contractual Services-OTHER	1,300		780	520
Reg Com Expense	561		337	224
Taxes other than Income	8,228		4,937	3,291
Amortization Expense	3,444		2,066	1,378
Materials and Supplies	15,996		9,598	6,398
Miscellaneous Expense	27,672		16,603	11,069
Subtotal	\$125,287		\$75,173	\$50,114
Operating Expenses	\$262,697	\$48,413	\$128,876	\$85,408
Source: Field Review 2007				

Allocation of Cost of Service				
Garrison-Quincy-KY-O'Heights Water District				
	Total	Commodity	Demand	Customer
Operation & Maintenance	\$262,697	\$48,413	\$128,876	\$85,408
Debt Service ¹	71,158		68,454	2,704
Depreciation ²	110,394		105,537	4,857
General Water Service Cost	\$444,249		\$302,867	\$92,969
Less:				
Interest Income	\$827			\$827
Other Operating Income	43,532			43,532
Bulk Sales ³	2,633			2,633
Revenue Required from Rates	\$397,257	\$48,413	\$302,867	\$45,977
NOTES:				
¹ The Debt Service has been allocated on the percentages from the Plant Value Sheet.				
² The Depreciation Expense has been allocated on the percentages from the Depreciation Expense Sheet. The Depreciation Expense has been reduced by \$14,676 to reflect the increase in revenue being requested by the District.				
³ The District is not seeking to increase the Bulk Sales Rate of \$7.00 per thousand gallon as this rate appears adequate for the amount of sales for this service.				

Calculation of Water Rates					
Garrison-Quincy-KY-O'Heights Water District					
	Total	First 2,000 gallons	Next 3,000 gallons	Next 5,000 gallons	Over 10,000 gallons
Actual Water Sales:					
Thousand Gallons	53,405,386	21,871,697	18,121,734	8,044,975	5,366,980
Percent	100%	41.0%	33.9%	15.1%	10.0%
Weighted Sales for Demand:					
		2	1.66	1.34	1
Thousand Gallons	89,972,719	43,743,394	30,082,078	10,780,267	5,366,980
Percent	100%	48.6%	33.4%	12.0%	6.0%
Allocation of Volumetric Costs:					
Commodity	\$48,413	\$19,849	\$16,412	\$7,310	\$4,841
Demand	302,867	147,193	101,158	36,344	18,172
Customer	45,977	45,977			
Total	\$397,257	\$213,019	\$117,570	\$43,654	\$23,013
Number of Bills	12,887				
Proposed Rates		\$16.53	\$6.49	\$5.43	\$4.29

Verification of Rates						
Garrison-Quincy-KY-O'Heights Water District						
			Bills	Gallons	Rate	Revenue
First	2,000	gallons	12,887	21,871,697	\$16.53	\$213,022
Next	3,000	gallons		18,121,734	6.49	117,610
Next	5,000	gallons		8,044,975	5.43	43,684
Over	10,000	gallons		5,366,980	4.29	23,024
Total Revenue from Rates						\$397,340
Other Operating Revenue:						
Interest Income						\$827
Other Operating Income						43,532
Bulk Sales				376,086	7.00	2,633
Totals			12,887	53,781,472		\$444,332

Comparison of Rates				
Garrison-Quincy-KY-O'Heights Water District				
Gallon Usage	Current Rates	Cost of Service Rates	Monetary Increase	Percentage Increase
1,000	\$12.18	\$16.53	\$4.35	35.7%
2,000	\$12.18	\$16.53	4.35	35.7%
3,000	\$17.63	\$23.02	5.39	30.6%
4,000	\$23.08	\$29.51	6.43	27.9%
5,000	\$28.53	\$36.00	7.47	26.2%
6,000	\$32.66	\$41.43	8.77	26.9%
7,000	\$36.79	\$46.86	10.07	27.4%
8,000	\$40.92	\$52.29	11.37	27.8%
9,000	\$45.05	\$57.72	12.67	28.1%
10,000	\$49.18	\$63.15	13.97	28.4%
15,000	\$66.53	\$84.60	18.07	27.2%
20,000	\$83.88	\$106.05	22.17	26.4%
25,000	\$101.23	\$127.50	26.27	26.0%
30,000	\$118.58	\$148.95	30.37	25.6%
35,000	\$135.93	\$170.40	34.47	25.4%
40,000	\$153.28	\$191.85	38.57	25.2%
50,000	\$187.98	\$234.75	46.77	24.9%
75,000	\$274.73	\$342.00	67.27	24.5%
100,000	\$366.93	\$455.74	88.81	24.2%
150,000	\$534.98	\$663.75	128.77	24.1%
200,000	\$708.48	\$878.25	169.77	24.0%
250,000	\$881.98	\$1,092.75	210.77	23.9%
300,000	\$1,055.48	\$1,307.25	251.77	23.9%
350,000	\$1,228.98	\$1,521.75	292.77	23.8%
Comparison of Rates				
	Block Usage		Current Rates	Proposed rates
First	2,000	gallons	\$12.18	\$16.53
Next	3,000	gallons	5.45	6.49
Next	5,000	gallons	4.13	5.43
Over	10,000	gallons	3.47	4.29
Effect on Customer Average Bill - 5,000 Gallons Usage				
Current Rates	Proposed Rates	Amount Increase	% Increase	
\$28.53	\$36.00	\$7.47	26.20%	

Garrison-Quincy-KY-O'Heights Water District					
Proposed Monthly Water Rates					
5/8" Meter					
First	2,000	gallons	\$16.53	Minimum bill	
Next	3,000	gallons	6.49	per 1,000 gallons	
Next	5,000	gallons	5.43	per 1,000 gallons	
Over	10,000	gallons	4.29	per 1,000 gallons	
1" Meter					
First	10,000	gallons	\$63.15	Minimum bill	
Over	10,000	gallons	4.29	per 1,000 gallons	
2" Meter					
First	50,000	gallons	\$234.75	Minimum bill	
Over	50,000	gallons	4.29	per 1,000 gallons	