Pittsfield Aqueduct Company, Inc. Combined Company

Report on Cost of Service Allocations and Rate Design

AUS Consultants

By

John R. Palko Principal

155 Gaither Drive, Suite A Mount Laurel, NJ 08054 Pittsfield Aqueduct Company, Inc. Combined Company Report on Cost of Service Allocations and Rate Design

Introduction

This report sets forth the procedures, findings, and results of a cost of service allocation and rate design study for Pittsfield Aqueduct Company, Inc. (the Company). As of the end of calendar year 2007, the Company provided water service to about 1,735 customers via four small water systems located in four communities. The Company serves water customers in Pittsfield through its Pittsfield Division; and in Barnstead, Conway, and Middleton through its North Country Division in the central and northern parts of New Hampshire.

This cost of service allocation and rate design study is based on the total pro forma revenue requirement for the combined Pittsfield and North Country operations for the twelve months ending December 31, 2007 as will be requested by the Company in its planned rate filing before the New Hampshire Public Utilities Commission.

This report parallels our individual reports for the Pittsfield Division and the North Country Division and should be read in conjunction with those reports.

Revenue Requirement

Every public utility must receive total revenues sufficient to ensure proper operation and maintenance, development and perpetuation of its system and facilities, and preservation of its financial integrity. Without adequate revenues, the public utility would not be able to provide safe and adequate service to its customers. The total revenue requirement of a public utility is synonymous with its total cost of service and represents the amount of monies which must be recovered from its customer base through a system of periodic rates and charges for utility service.

Cost of service allocation and rate design studies for investor-owned water utilities reporting to a regulatory authority are often conducted in conjunction with the processing of a rate relief application at which time it is usually necessary to develop a pro forma revenue requirement. Such is the case in the present study which is based on the pro forma operations for the test year ended December 31, 2007, as developed by the management of the Company.

For the purpose of this study, the total pro forma revenue requirement, as developed by the Company for the test year ended December 31, 2007, may be summarized as follows:

Item	Amount
Operation and Maintenance Expense	\$980,411
Depreciation and Amortization	147,883
Taxes Other Than Income Tax	95,893
Net Operating Income	379,130
Income Taxes	137,176
Total Revenue Requirement	<u>\$1,740,493</u>

As subsequently discussed herein, this study results in the allocation of the \$1,740,493 revenue requirement to functional costs and rate elements. It is noted that some \$11,177 of the revenue requirement is projected to be obtained from other revenue or miscellaneous service revenue leaving a net revenue requirement of \$1,729,316 to be recovered from a schedule of rates and charges for water service. This is the revenue amount the Company is requesting in temporary rates to relieve its net operating losses.

Plant Investment

The Company maintains its plant investment accounts in accordance with the fixed capital reporting requirements of the New Hampshire Public Utilities Commission. Under this system, the original cost and the depreciation expense for utility plant in service as of December 31, 2007 may be summarized as follows:

Plant in Service	Original Cost	Depreciation Expense
Source of Supply and Pumping	\$1,657,783	\$30,899
Water Treatment	1,192,866	35,806
Transmission and Distribution	3,842,441	74,315
General	131,275	5,773
Intangible	298,621	12,865
Total Utility Plant in Service	<u>\$7,122,986</u>	<u>\$159,658</u>

As subsequently discussed herein, the above original cost elements and depreciation expense elements are allocated to a group of functional costs. The results of these allocations then become an input into the allocation of the pro forma revenue requirement.

Cost of Service Allocation

The pro forma revenue requirement (or equivalently, the total cost of service) was allocated to three broad functional cost categories, namely Volume Cost, Customer Cost, and Direct Fire Cost. These allocations are set forth in detail on the accompanying Schedules C1 through C6.

The Volume Cost Component, in the study developed herein, encompasses all the volume related elements of the cost of service. That is, the Volume Cost Component includes both costs associated with serving customers under average load conditions and costs associated with meeting rate-of-use requirements in excess of average. Stated in

another manner, volume costs comprise all costs other than customer costs or direct fire costs.

The Customer Cost Component includes those costs associated with connecting and serving customers irrespective of the volume of water used or the demand requirements imposed on the system. Customer costs generally comprise capital and operating costs related to services, meters, and customer installations and meter reading, billing, and collecting expenses. In the present study, a portion of the costs and expenses related to transmission and distribution mains and distribution reservoirs were also allocated to the Customer Cost Component.

The Direct Fire Cost Component includes those costs associated with the installation, operation, and maintenance of fire hydrants together with a portion of the costs and expenses related to transmission and distribution mains and distribution reservoirs.

The accompanying Schedule C1 sets forth the allocation of utility plant in service at December 31, 2007. The results of the utility plant allocation are used to allocate property insurance and property taxes.

The results of the utility plant allocation are also an input into the rate base allocation. The accompanying Schedule C2 sets forth the allocation of the rate base at December 31, 2007. The results of the rate base allocation are used to allocate capital related elements of the revenue requirement such as net operating income and income taxes.

The accompanying Schedule C3 sets forth the allocation of the depreciation expense at December 31, 2007. The results of this allocation are used to allocate the pro forma depreciation and amortization expense.

The accompanying Schedule C4 sets forth in detail the allocation of the pro forma operation and maintenance expense. The results of this allocation become part of the revenue requirement allocation.

The accompanying Schedule C5 sets forth the allocation of the pro forma operating expense and other revenue requirements. Other revenue has been deducted from the revenue requirement allocations resulting in a net revenue requirement allocation. As shown on Schedule C5, the Volume Cost component accounts for 61.49% of the net revenue requirement while the Customer Cost Component accounts for 32.03% and the Direct Fire Cost Component accounts for 6.48%.

The right-most columns of Schedules C1 through C5 are headed "Allocation Code" and set forth the codes for the specific allocation factors used in this study. The allocation codes are simply reference numbers which designate groups of percentages which are used to allocate the total amount of any given cost element to the several cost functions. The accompanying Schedule C6 lists the allocation codes and percentage factors and contains a brief written description of the allocation bases.

Allocation of Mains and Distribution Reservoirs

As noted previously herein, portions of the costs and expenses related to transmission and distribution mains and distribution reservoirs were allocated to both the Customer Cost Component and the Direct Fire Cost Component in addition to being allocated to the Volume Cost Component. As shown by Allocation Code 04 on Schedule C6, 35% of the main costs and expenses were allocated to volume with 50% allocated to customer and 15% allocated to direct fire. These percentages were determined through an analysis of the inch-feet of mains in service at December 31, 2007.

The accompanying Schedule C7 sets forth the lengths of transmission and distribution mains in service as of December 31, 2007. As shown on Page 1 of Schedule C7, there were a total of 205,269 feet of transmission and distribution mains in service as of December 31, 2007. Page 1 of Schedule C7 illustrates both the reduction of all larger size mains to a 2" diameter and the calculation of inch-feet of mains. An inch-foot is simply the length of main in feet multiplied by the size of the diameter in inches. As shown on Page 1 of Schedule C7, there was an actual total of 844,913 inch-feet as of December 31, 2007. Under the reduction in size, there are only 407,271 inch-feet or about 50% of the actual number. This 50% is the customer cost portion of the mains. In essence, reducing the mains to 2" in diameter is similar to developing a minimum size system. This is also similar to the minimum size distribution system concept used in electric cost of service analyses.

Page 2 of Schedule C7 sets forth the methodology used to determine the direct fire cost portion of mains. All mains larger than 4" in the Pittsfield Division were reduced to the next smaller size. (There is no fire protection service in the North Country Division.) Generally, without fire protection, mains can be sized at least one size smaller. As shown on Page 2 Schedule C7, this reduction results in 715,645 inch-feet which is 15.30% less than the actual number. That is, approximately 15% (15.30% rounded down) of the main size is directly related to fire protection. This 15% is the direct fire cost portion of the mains.

Private Fire Protection/Municipal Fire Protection

The Direct Fire Cost Component contains costs related to the provision of both private fire protection and municipal fire protection. The accompanying Schedule C8 sets forth the allocation of direct fire costs to private and municipal fire protection. The allocations are primarily based on the relative numbers of hydrants and the weighted fire protection units.

The accompanying Schedule C9 illustrates the development of the percentage factors used in the allocation of direct fire costs to private fire and municipal fire.

The accompanying Schedule C10 sets forth the calculation of the weighted fire protection units. As noted thereon, the weighting factors are based on the ratio of the cross-sectional area of a given service size to the cross-sectional area of a 6" service, with hydrants assumed to have 6" branches.

In addition to the direct fire costs, certain elements of both the volume cost and the customer cost are related to the provision of both private fire protection service and municipal fire protection service. The accompanying Schedule C11 illustrates the allocation of volume costs and customer costs to private fire and municipal fire.

Customer costs were allocated to fire based on the relative numbers of bills and the weighted number of services. The accompanying Schedule C12 shows the numbers of bills and the calculation of weighted services. Weighted services are based on the ratio of service diameters.

In order to allocate volume costs to fire, reference was made to the AWWA Water Rates Manual M1, Fourth Edition. Chapter 5 therein, "Rate Design for Small Water Utilities", indicates that it is appropriate and reasonable for a water utility with 1,750 customers to obtain approximately 25% of its revenues from fire protection charges. This recommendation was used as a guideline to allocate some of the volume costs to fire. As noted at the bottom of Schedule 12, a conservative approach was taken by setting fire protection revenue to 15% of the total revenue requirement; this resulted in \$146,882 of volume costs being allocated to fire.

After allocating direct fire to private and municipal fire and allocating volume and customer costs to fire, the resulting allocation, as shown at the bottom of Schedule C 11, indicates that 53.11% of the revenue requirement is attributable to volume costs, 31.89% is attributable to customer costs, 2.10% is attributable to private fire, and 12.90% is attributable to municipal fire. This information allows for the development of a rate design to generate the revenue requirement.

Revenues From Present Rates

Before designing a schedule of developed rates based on the allocations set forth herein, revenues under present rates were calculated. This calculation was based on the reported numbers of meters and fire protection units in service at December 31, 2007 together with the reported billable volumetric water usage during calendar year 2007.

The accompanying Schedule C13 sets forth the calculation of revenues under present rates. As shown on Page 3 of Schedule C13, 50.97% of present rate revenue is obtained from general water service volumetric charges, 28.83% is obtained from general water service customer (or minimum) charges, 1.82% is obtained from unmetered service, 2.73% is obtained from private fire protection charges, and 15.65% is obtained from municipal fire protection charges.

The Existing Rate Schedule

The present rate schedule used by the Company for general water service comprises a monthly minimum customer charge which varies by meter size together with a uniform volumetric usage charge applied to all water used. In addition, there are flat rate unmetered charges which are billed to 10 customers in Middleton and to 39 customers in North Conway in the North Country Division.

With respect to private fire protection service, there is a monthly charge which varies by connection or service size.

With respect to municipal fire protection service, there are two parts to the total charge for service. At present, there is a \$66.63 monthly charge per hydrant combined with an effective annual inch-foot charge of \$0.14040 applied to mains 6" and larger in diameter. (It is noted that per Schedule FP-M of the tariff, the inch-foot charge is stated as \$0.03510; however, this charge is billed four times per year, resulting in an effective annual \$0.14040 inch-foot charge. It is suggested that the tariff language be modified to avoid any confusion or mis-interpretation in the billing procedures.)

The rates and charges presently set forth in the Company's tariff were used in the calculation of present rate revenues on Schedule C13 and may be found thereon.

Rate Design

The design of rates, based on the allocations set forth and discussed herein, is presented on the accompanying Schedule C14.

Page 1 of Schedule C14 sets forth the rate design for municipal fire protection. As shown thereon, an increase of about 84% is indicated. As also shown on Page 1, the monthly cost per hydrant is \$286.07; however, since an inch-foot charge is also used, the

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developed charges for municipal fire protection service becomes \$122.57 per month for each hydrant and \$0.25828 annually for each billable inch-foot unit.

Page 2 of Schedule C14 sets forth the rate design for private fire protection. As noted thereon, an increase of about 71% is indicated. All private fire protection rate elements have been increased by this percentage.

Page 3 of Schedule C14 sets forth the rate design for the customer or minimum charges. As shown thereon, an increase of about 140% is indicated. The monthly rates for all meter sizes have been increased by this percentage. In determining the percentage increase, unmetered revenue was considered. The development of the unmetered rates will recognize this consideration.

Page 4 of Schedule C14 sets forth the design of the volumetric usage rate. The volumetric rate is the "balance wheel" in the rate design. It provides the remaining amount of the pro forma net revenue requirement after deducting the developed revenues from municipal fire protection, private fire protection, customer charges, and a portion of the unmetered revenue. Additionally, as noted on Page 4, an annual use of 50 ccf has been estimated for each unmetered customer; this usage will be recognized in the development of the unmetered rate. The developed volumetric rate is about 128% greater than the existing volumetric rate.

Finally, Page 5 of Schedule C14 sets forth the design of the general water service unmetered rate. This rate is based on the developed 5/8" meter charge and an estimated usage of 50 ccf per customer per year. The 50 ccf estimated annual usage is based on the average residential usage of metered customers located in the North Country Division of the Company.

Revenues from Developed Rates

The accompanying Schedule C15 sets forth the calculation of revenues under the developed rates. As shown on Page 3 of Schedule C15, 51.99% of developed rate revenue is obtained from general water service volumetric charges, 31.10% is obtained from general water service customer (or minimum) charges, 1.91% is obtained from charges for unmetered service, 2.10% is obtained from private fire protection charges, and 12.90% is obtained from municipal fire protection charges. The developed rates, when applied to the billing parameters, generate \$1,729,178 in revenue. This revenue amount is about \$138 less than the net revenue requirement of \$1,729,316. This difference is only 0.008% and is considered negligible.

<u>Closure</u>

The results of the studies set forth and discussed herein can provide guidelines to be utilized in restructuring the Company's rates and charges for service. However, it must be remembered that cost of service allocations are the products of analyses based in part on judgment and experience and as such, while their results are a substantial aid in the design of rates, they are not meant to be literal, exact "gospel truth" type answers. Seldom, if ever, are rates exactly in line with the costs of service at any given time nor is it usually possible to design rate structures which are in complete exact agreement with all aspects of a cost of service allocation study. Generally, minor differences will exist just as a matter of normal circumstances. In addition, attempts to exactly meet the cost of service indications in one rate adjustment can impose extremely large and undue burdens on individual customers or customer groups. Most rate consultants favor a process of gradually bringing deficiency in revenue generation in line with cost of service indications so as to avoid or ameliorate undue or abrupt changes in rate structure. Actual rate and tariff design, in addition to relying on the results of cost of service allocation analyses, should also include consideration of policy matters, impact and extent of rate changes, past historical practice, future planning, special customer characteristics and regulatory and contract requirements.

Further, with respect to the Pittsfield Aqueduct Company, consideration should be given to the individual cost of service allocation and rate design studies prepared separately for the Pittsfield Division and for the North Country Division. Review of all three studies indicates that rate development on a Combined Company basis would result in subsidization of the North Country Division by the Pittsfield Division. This subsidization is perhaps best illustrated by reference to the developed volumetric rates in each of the studies. The Combined Company volumetric rate developed herein is \$7.51 per hundred cubic feet of water usage. In comparison, the stand-alone developed volumetric rates are \$5.09 in the Pittsfield Division and \$9.24 in the North Country Division. The combined rate is approximately midway between the two divisional rates, thus indicating that its use would result in Pittsfield Division customers paying a higher unit charge for their water usage than they would on a stand-alone basis while the North Country Division customers would pay a lower charge.

Pittsfield Aqueduct Company, Inc. Combined Company

Schedules C1 through C15

To Accompany

Report on Cost of Service Allocations and Rate Design

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Pittsfield Aqueduct Company, Inc. Combined Company Allocation of Utility Plant in Service at December 31, 2007

Acc't Description	Total <u>Cost</u>	<u>Volume</u>	<u>Customer</u>	Direct Fire	Allocation <u>Code</u>
Source of Supply and Pumping Plant					
303 Land and Land Rights	183,965	183,965	0	0	01
304 Structures and Improvements	981,131	981,131	0	0	01
305 Collecting and Impounding Reservoirs	48,493	48,493	0	0	01
306 Lake, River and Other Intakes	29.050	29.050	0	0	01
307 Wells and Springs	91,568	91,568	Ō	0	01
309 Supply Mains	16 726	16,726	0	0	01
310 Power Generation Equipment	32 518	32,518	0	0	01
311 Pumping Equipment	274,332	274,332	0	0	01
Total Supply and Pumping Plant	1,657,783	1,657,783	0	0	
Water Treatment Plant					
304 Structures and Improvements	934,998	934,998	0	0	01
320 Water Treatment Equipment	257,868	257,868	0	0	01
Total Water Treatment Plant	1,192,866	1,192,866	0	0	
Transmission and Distribution Plant					
330 Distribution Reservoirs	521,032	182.361	260,516	78,155	04
331 Transmission and Distribution Mains	2,668,708	934,048	1.334.354	400,306	04
333 Services	260,923	0	260,923	0	02
334 Meters and Meter Installations	305,583	0	305,583	0	02
335 Hydrants	77,338	0	0	77,338	03
Subtotal Transmission and Distribution Plant	3,833,584	1,116,409	2,161,376	555,799	
Percents Code 05	100.00%	29.12%	56.38%	14.50%	
339 Other Plant and Miscellaneous Equipment	8,857	2,579	4,994	1,284	05
Total Transmission and Distribution Plant	3,842,441	1,118,988	2,166,370	557,083	
Subtotal Above Plant	6,693,090	3,969,637	2,166,370	557,083	
Percents Code 06	100.00%	59.31%	32.37%	8.32%	
General Plant					
340 Office Furniture and Equipment	2.689	1.595	870	224	06
343 Tools Shop and Garage Equipment	40,310	23,908	13,048	3,354	06
344 Laboratory Equipment	3,939	2,336	1,275	328	06
346 Communication Equipment	44,990	26.684	14,563	3,743	06
347 Computer Equipment	26,292	15.594	8.511	2,187	06
348 Miscellaneous Equipment	13,055	7,743	4,226	1,086	06
Total General Plant	131,275	77,860	42,493	10,922	
Intangible Plant					
301 Organization	298.621	177.112	96.664	24.845	06
302 Franchise	0	0	0	0	06
Total Intangible Plant	298,621	177,112	96,664	24,845	
Total Utility Plant in Service	7,122,986	4,224,609	2,305,527	592,850	
Percents Code 06	100.00%	59.31%	32.37%	8.32%	

Pittsfield Aqueduct Company, Inc. Combined Company Allocation of Rate Base at December 31, 2007

<u>Acc'l</u>	Description	Total <u>Cost</u>	Volume	<u>Customer</u>	Direct Fire	Allocation Code
	Total Utility Plant in Service	7,122,986	4,224,609	2,305,527	592,850	
Accumulate	ed Depreciation					
	Organization	(34,824)	(20,654)	(11,273)	(2,897)	06
	Structures	(252,998)	(252,998)	0	0	01
	Pumping and Distribution Equipment	(22,217)	(22,217)	0	0	01
	Transmission and Distribution Mains	(523,027)	(183,059)	(261, 514)	(78,454)	04
	Services	(62,758)	0	(62,758)	0	02
	Meters	(30,587)	0	(30,587)	0	02
	Hydrants	(17,247)	0	0	(17,247)	03
	Other Equipment	(50,450)	(29,922)	(16,331)	(4, 197)	06
	Accumulated Depreciation - Loss	121,754	72,212	39,412	10,130	06
	Accumulated Depreciation - Cost of Removal	79,758	47,304	25,818	6,636	06
	Total Accumulated Depreciation	(792,596)	(389,334)	(317,233)	(86,029)	
Contributio	ns In Aid of Construction					
	CIAC - Mains	(764,382)	(267,534)	(382,191)	(114,657)	04
	CIAC - Water Filtration	(398,350)	(398,350)	0	0	01
	Amortize CIAC - Mains	143,969	50,389	71,985	21,595	04
	Amortize CIAC - Water Filtration	76,393	76,393	0	0	01
	Total CIAC	(942,370)	(539,102)	(310,206)	(93,062)	
	Subtotal Above Rate Base Items	5,388,020	3,296,173	1,678,088	413,759	
Additions to	o Rate Base					
	Working Capital	100,863	63,463	32,589	4,811	09
	Materials & Supplies	0	0	0	0	06
	Prepaid Insurance	6,738	3,996	2,181	561	06
	Prepaid Property Taxes	7,024	4,166	2,274	584	06
	Deferred Charges - Main Breaks	20,512	7,179	10,256	3,077	04
	Deferred Charges - Other Items	37,345	22,149	12,089	3,107	06
	Total Additions	172,482	100,953	59,389	12,140	
Deductions	s from Rate Base					
	Customer Advances	0	0	0	0	04
	Customer Deposits	(86)	0	(86)	0	02
	Deferred Income Tax	(246,512)	(146,206)	(79,796)	(20,510)	06
	Total Deductions	(246,598)	(146,206)	(79,882)	(20,510)	
	Totaki Rate Base	5,313,904	3,250,920	1,657,595	405,389	
	Percents Code 13	100.00%	61.18%	31.19%	7.63%	

Pittsfield Aqueduct Company, Inc. Combined Company Allocation of Depreciation Expense - Pro Forma at December 31, 2007

	Total				Allocation
Acc't Description	Cost	Volume	Customer	Direct Fire	Code
Ourses of Ourselves of Durasian Disat					
Source of Supply and Pumping Plant	0	0	0	0	01
303 Land and Land Rights	8 412	8 4 1 2	0	0	01
305 Collecting and Impounding Personaire	713	713	0	0	01
306 Lake River and Other Intakes	581	581	0	0	01
307 Welle and Springs	2 035	2 035	0	0	01
309 Sunnly Mains	186	186	0	0	01
310 Power Generation Equipment	1 990	1 990	0	0	01
311 Pumping Equipment	16,982	16,982	0	o	01
Total Supply and Pumping Depreciation Evo	30 899	30 800	0	0	
Total Supply and Fomping Depresation Exp.	30,033	50,055	0	0	
Water Treatment Plant					
304 Structures and Improvements	27,248	27,248	0	0	01
320 Water Treatment Equipment	8,558	8,558	0	0	01
Total Water Treatment Depreciation Exp.	35,806	35,806	0	0	
Transmission and Distribution Plant					
330 Distribution Reservoirs	12 675	4 4 3 6	6 338	1 901	04
331 Transmission and Distribution Mains	40,941	14.329	20,471	6,141	04
333 Services	4,813	0	4.813	0,141	02
334 Meters and Meter Installations	14.382	0	14 382	õ	02
335 Hydrants	1,029	0	0	1,029	03
Subtotal Trans.and Dist.Depreciation Exp.	73,840	18,765	46,004	9.071	
339 Other Plant and Miscellaneous Equipment	475	138	268	69	05
Total Trans. and Dist. Depreciation Exp	74,315	18,903	46,272	9,140	
Subtotal Above Depreciation Exp.	141,020	85,608	46,272	9,140	
General Plant					
340 Office Furniture and Equipment	134	79	43	12	06
343 Tools Shop and Garage Equipment	3.263	1.935	1.056	272	06
344 Laboratory Equipment	197	117	64	16	06
346 Communication Equipment	1,733	1.028	561	144	06
347 Computer Equipment	228	135	74	19	06
348 Miscellaneous Equipment	218	129	71	18	06
Total General Depreciation Exp.	5,773	3,423	1,869	481	
Interacible Plant					
<u>manyor ram</u> 301 Oroanization	12 865	7 630	A 16A	1 071	06
302 Franchise	12,000	7,030	4,104	1,071	06
JUZ Tranchise	0	0	Ū	U	00
Total Intangible Depreciation Exp.	12,865	7,630	4,164	1,071	
Subtotal Utility Plant Depreciation Exp.	159,658	96,661	52,305	10,692	
Percents Code 07	100.00%	60.54%	32.76%	6.70%	
Add New Depreciation Rate Adjustment	(5,186)	(3,140)	(1,699)	(347)	07
Total Utility Plant Depreciation Exp Pro Forma	154,472	93,521	50,606	10.345	

Pittsfield Aqueduct Company, Inc. Combined Company Allocation of Operation and Maintenance Expense - Pro Forma at December 31, 2007

Acc't	Description	Total <u>Cost</u>	Volume	Customer	Direct Fire	Allocation Code
Production F						
T	otal Supply, Pumping, and Water Treatment	258,525	258,525	0	0	01
Transmissio	n and Distribution Expenses					
662 T	rans & Dist Lines Expense	611	214	306	91	04
663 N	Neter Expenses	8,541	0	8,541	0	02
664 C	Sustomer Installation Expenses	2,565	0	2,565	0	02
665 N	fiscellaneous Expenses	1,278	0	1,278	0	02
660 C	peration Supervision and Engineering	29,129	8,482	16,423	4,224	05
673 N	faintenance of Trans & Dist Mains	75,547	26,441	37,774	11,332	04
675 N	laintenance of Services	44,970	0	44,970	0	02
676 N	faintenance of Meters	3,164	0	3,164	0	02
677 N	faintenance of Hydrants	5,914	0	0	5,914	03
678 N	faintenance of Miscellaneous Equipment	5,662	1,649	3,192	821	05
т	otal Transmission and Distribution O&M	177,381	36,786	118,213	22,382	
P	Percents Code 08	100-00%	20.74%	66.64%	12.62%	
.						
Customer Ac	counts Expenses otal Customer Accounts Expenses	33,443	0	33,443	0	02
		100.010	005.044			
5	Subtotal Above O&M Expenses	469,349	295,311	151,656	22,382	
F	Percents Code 09	100.00%	62.92%	32.31%	4.77%	
Administrativ	re and General Expenses					
924 F	Property Insurance	12,333	7,315	3,992	1,026	06
A	II Other A&G Expense	43,012	27,063	13,897	2,052	09
т	otal Administrative and General Expenses	55,345	34,378	17,889	3,078	
S	ubtotal Above O&M Expenses	524,694	329,689	169,545	25,460	
P	Percents Code 10	100.00%	62.84%	32.31%	4.85%	
Inter Div Mar	nagement Fee					
Т	otal Management Fee	455,717	278,306	147,379	30,032	11
т	otal Operation and Maintenance Expenses	980.411	607 995	316 924	55 492	
•			007,000	0.0,024	00,402	
P	ercents	100.00%	62.01%	32.33%	5.66%	

Pittsfield Aqueduct Company, Inc. Combined Company Allocation of Pro Forma Operating Expense and Other Revenue Requirements

Acc't Description	Total <u>Cost</u>	Volume	<u>Customer</u>	Direct Fire	Allocation Code
Operation and Maintenance Expense					
Total Operating Expense	980,411	607,995	316,924	55,492	
Depreciation and Amortization					
Total Depreciation and Amortization	147,883	89,528	48,446	9,909	07
Taxes Other Than Income Taxes					
Total Other Taxes (Property Taxes)	95,893	56,874	31,041	7,978	06
Net Operating Income					
Pro Forma Net Operating Income	379,130	231,952	118,251	28,927	13
Income Taxes					
Pro Forma Income Taxes	137,176	83,924	42,785	10,467	13
Total Pro Forma Revenue Requirement	1,740,493	1.070.273	557,447	112,773	
	.,,	.,		,	
Percents Code 12	100.00%	61.49%	32.03%	6.48%	
Less Other Revenue	(11,177)	(6,873)	(3,580)	(724)	12
Net Revenue Requirement	1,729,316	1,063,400	553,867	112,049	
Percents Code 12	100.00%	61.49%	32.03%	6.48%	

Pittsfield Aqueduct Company, Inc. Combined Company Summary of Allocation Factors

Allocation Code	Description	% <u>Volume</u>	% <u>Customer</u>	% Direct Fire	Check <u>Total %</u>
01	Volume Cost	100.00	0.00	0.00	100.00
02	Customer Cost	0.00	100.00	0.00	100.00
03	Direct Fire Cost	0.00	0.00	100.00	100.00
04	Trans. And Dist. Mains	35.00	50.00	15.00	100.00
0 5	Trans. And Dist. Plant	29.12	56.38	14.50	100.00
06	Total Plant	59.31	32.37	8.32	100.00
07	Depreciation Expense	60.54	32.76	6.70	100.00
08	Trans. And Dist. O&M Expense	20.74	66.64	12.62	100.00
09	O&M Before A&G and Management Fee	62.92	32.31	4.77	100.00
10	O&M Before Management Fee	62.84	32.31	4.85	100.00
11	Management Fee	61.07	32.34	6.59	100.00
12	Revenue Requirement	61.49	32.03	6.48	100.00
13	Rate Base	61.18	31.19	7.63	100.00

Explanation of Factors Used in the Allocations

- 01 This Code allocates items 100 percent to Volume Cost.
- 02 This Code allocates items 100 percent to Customer Cost.
- 03 This Code allocates items 100 percent to Direct Fire Cost
- 04 This Code allocates items to the cost components based on analyses of transmission and distribution inch-feet.
- 05 This Code allocates items to the cost components based on the composite allocation of transmission and distribution plant.
- 06 This Code allocates items to the cost components based on the composite allocation of total utility plant.
- 07 This Code allocates items to the cost components based on the composite allocation of depreciation expense
- 08 This Code allocates items to the cost components based on the composite allocation of transmission and distribution operation and maintenance expense.
- 09 This Code is based on the composite allocation of O&M expense without A&G expense and the management fee.
- 10 This Code is based on the composite allocation of O&M expense without the management fee.
- 11 This Code is based on equal weightings of Codes 06 and 11. It is used to allocate the management fee.
- 12 This Code allocates items to the cost components based on the composite allocation of the revenue requirement.
- 13 This Code allocates items to the cost components based on the composite allocation of the rate base.

Pittsfield Aqueduct Company, Inc. Combined Company Transmission and Distribution Inch-Feet Inch-Feet of Mains in Service at December 31, 2007 Reduce Larger Mains to 2" Size

Actual Mains in Service Re		Reduce La	rger Mains	to 2" Size	
<u>Size</u>	Length	<u>In-Ft</u>	<u>Size</u>	<u>Length</u>	In-Ft
1 1/4'	1,798	2,247.5	1 1/4'	1,798	2,247.5
1 1/2"	3,837	5,755.5	1 1/2"	3,837	5,755.5
2"	85,201	170,402.0	2"	85,201	170,402.0
3"	4,220	12,660.0	2"	4,220	8,440.0
4"	44,742	178,968.0	2"	44,742	89,484.0
6"	31,349	188,094.0	2"	31,349	62,698.0
8"	29,811	238,488.0	2"	29,811	59,622.0
10"	1,717	17,170.0	2"	1,717	3,434.0
12"	2,594	31,128.0	2"	2,594	5,188.0
Total	205,269	844,913.0	Totai	205,269	407,271.0
	Inch-Feet B	ased on Actual	Size of Mains		844.913.0

	• • •
Inch-Feet Based on Reduced Size of Mains	407,271.0
Difference	437,642.0
	51.80%

Pittsfield Aqueduct Company, Inc. Combined Company Transmission and Distribution Inch-Feet Inch-Feet of Mains in Service at December 31, 2007 Reduce Larger One Size

Pittsfield Division Actual Mains in Service			ا <u>R</u>	Pittsfield Division Reduced One Size			
<u>Size</u>	Length	<u>In-Ft</u>	Size	<u>Length</u>	<u>In-Ft</u>		
1 1/4'	0	0.0	1 1/4'	0	0.0		
1 1/2"	0	0.0	1 1/2"	0	0.0		
2"	5,345	10,690.0	2"	5,345	10,690.0		
3"	0	0.0	3"	0	0.0		
4"	1,185	4,740.0	4"	1,185	4,740.0		
6"	30,701	184,206.0	4"	30,701	122,804.0		
8"	29,622	236,976.0	6"	29,622	177,732.0		
10"	1,717	17,170.0	8"	1,717	13,736.0		
12"	2,594	31,128.0	10"	2,594	25,940.0		
Total	71,164	484,910.0	Total	71,164	355,642		

Inch-Feet Based on Actual Size of Mains (PAC)	484,910.0
Inch-Feet Based on Reduced Size of Mains (PAC)	355,642.0
Difference	129,268.0
Total Combined Company Actual Inch-Feet	844,913.0
Total Combined Company Reduced Inch-Feet	715,645.0
Difference	129,268.0
	15.30%

Pittsfield Aqueduct Company, Inc. Combined Company Allocation of Direct Fire Costs to Private and Municipal Fire

ltem	Total Direct <u>Fire</u>	Private Fire <u>Protection</u>	Municipal Fire Protection
Total Operating Expense - C	55,492	5,383	50,109
Total Depreciation and Amort - B	9,909	1,293	8,616
Total Other Taxes - A	7,978	1,011	6,967
Pro Forma Net Oper Income - A	28,927	3,665	25,262
Pro Forma Income Taxes - A	10,467	1,326	9,141
Total Pro Forma Revenue Req'm'nt	112,773	12,678	100,095
Percents	100.00%	11.24%	88.76%
Less Other Revenue	(724)	(81)	(643)
Net Revenue Requirement	112,049	12,597	99,452
Percents	100.00%	11.24%	88.76%

Pittsfield Aqueduct Company, Inc. Combined Company Development of Factors for Private/Municipal Fire Allocation

	Total Direct	Private Fire	Municipal Fire
Item	<u>Fire</u>	Protection	Protection
<u>Plant in Service</u> Hydrants	77,338	0	77,338
Allocated Based on Number of Hydrants	65	0	65
Dist. Reservoirs Trans. And Dist. Mains	78,155 400,306		
Total	478,46 1	70,429	408,032
Allocated Based on Weighted Number of Units	100.00%	14.72%	85.28%
Total Above Plant	555,799	70,429	485,370
Plant Percents - A	100.00%	12.67%	87.33%
Depreciation Expense Hydrants	1,029	0	1,029
Allocated Based on Number of Hydrants	65	0	65
Dist. Reservoirs Trans. And Dist. Mains	1,901 6,141		
Total	8,042	1,184	6,858
Allocated Based on Weighted Number of Units	100.00%	14.72%	85.28%
Total Above Depr. Exp.	9 ,071	1,184	7,887
Depr. Exp. Percents - B	100.00%	13.05%	86.95%
<u>O&M Expense</u> Hydrants	5,914	0	5,914
Allocated Based on Number of Hydrants	65	0	65
Dist. Reservoirs Trans. And Dist. Mains	0 11,423		
Total	11,423	1,681	9,742
Allocated Based on Weighted Number of Units	100.00%	14.72%	85.28%
Total Above O&M Exp.	17,337	1,681	15,656
O&M Exp. Percents - C	100.00%	9.70%	90.30%

Pittsfield Aqueduct Company, Inc. Combined Company Calculation of Weighted Fire Protection Units

Private Fire Protection

			Weighted	
<u>Size</u>	<u>Number</u>	Factor	Number	<u>%</u>
4"	1	0.44	0.44	
6"	9	1.00	9.00	
8"	1	1.78	1.78	
Total	11		11.22	14.72%

Municipal Fire Protection

Actual Number of Hydrants:					
Total	65	1.00	65.00	85.28%	
Grand Total			76.22	100.00%	

Notes: Weighting factors are based on the ratio of the cross-sectional area of a given size to the cross-sectional area of a 6" service. Hydrants are assumed to have a 6" branch.

Pittsfield Aqueduct Company, Inc. Combined Company Allocation of Volume and Customer Costs to Fire Protection

COS Allocation Results

Net Revenue Requirement	1,729,316	100.00%
Direct Fire Costs - Municipal	99,452	5.75%
Direct Fire Costs - Private	12,597	0.73%
Customer Costs	553,867	32.03%
Volume Costs	1,063,400	61.49%
	\$ Amount	%
COO ADOUBDON NESSUNS		

The above results contain certain volume costs and certain customer costs which are properly allocable to private fire and to municipal fire.

Customer Costs:		
Cust Rec & Coll Exp.:	\$ Amount	% of Bills
Remain in Customer	18,814	99.32%
Alloc to Private Fire	118	0.62%
Alloc to Municipal Fire	11	0.06%
Total Cust. Rec & Coll Exp	18,943	100 00%
Cust. Installation Exp.:	\$ Amount	% of Svcs
Remain in Customer	2,446	95.38%
Alloc to Private Fire	119	4.62%
Alloc to Municipal Fire	0	0.00%
Total Cust. Installation Exp.	2,565	100.00%
Maint. of Services:	<u>\$ Amount</u>	% of Svcs
Remain in Customer	42,892	95.38%
Alloc to Private Fire	2,078	4.62%
Alloc to Municipal Fire	0	0.00%
Total Maint. of Services	44,970	100.00%

With above three allocations, the resulting fire allocation becomes:

\$ Amount	%
114,375	6.61%

According to AWWA Water Rates Manual M1, Fourth Edition, Chapter 5, "Rate Design for Small Water Utilities", it is appropriate for aproximately 25% of the revenues of a 1,750 customer water utility to be obtained from fire protection. This recommendation can be used as a guideline to allocate some of the volume costs to fire protection. To be conservative, the target fire protection revenue can be set at 15% of total revenue or \$ 259,397. this means that \$ 145,022 of the volume costs would then be allocated to fire

Reallocate Volume Costs: Alloc to Private Fire	<u>\$ Amount</u> 21,347	<u>% of Units</u> 14.72%
Alloc to Municipal Fire	123,675	85.28%
Total Reallocated Volume Cost	145,022	100.00%
Reallocation Results		
	\$ Amount	%
Volume Costs	918,378	53.11%
Customer Costs	551,541	31.89%
Direct Fire Costs - Private	36,259	2.10%
Direct Fire Costs - Municipal	223,138	12.90%
Net Revenue Requirement	1,729,316	100.00%

Pittsfield Aqueduct Company, Inc. Combined Company Calculation of Weighted Number of Services

GWS				
Meter	Number	Service	Weighted	
<u>Size</u>	of Meters	Factor	<u>Number</u>	<u>%</u>
5/8"	1,6 56	1.0	1,656.0	
3/4"	1	1.3	1.3	
1"	14	2.0	28.0	
1 1/2"	11	2.7	29.7	
2"	12	4.0	48.0	
3"	1	4.0	4.0	
4"	0	5.3	0.0	
Unmetered	49	1.0	49.0	
Totai	1,744		1,816.0	95.38%
Private				
Fire		Service	Weighted	
<u>Size</u>	<u>Number</u>	Factor	<u>Number</u>	
4"	1	5. 3	5.3	
6"	9	8.0	72.0	
8"	1	10.7	10.7	
Total	11		88.0	4.62%
Grand Total			1,904.0	100.00%

Notes: Weighting factors are based on the ratio of service diameters.

Percentage Distribution of Bills

<u>Class</u>	Number of Bills	<u>%</u>	
GWS	20,928	99.32	%
Private Fire	132	0.62	%
Muni. Fire	12	0.06	%
Total	21,072	100.00	%

Pittsfield Aqueduct Company, Inc. Calculation of Revenues Under Present Rates

General Water Service - Combined Company

Residential:						
Meter	Number	Number	Ρ	resent		Present
<u>Size</u>	of Meters	of Bills		<u>Rate</u>		Revenue
5/8"	1,597	19,164	\$	10.27	\$	196,81 4.28
3/4"	1	12		14.61		175.32
1"	8	96		22.08		2,119.68
1 1/2"	6	72		39.81		2,866.32
2"	1	12		61.58		738.96
3"	0	0		114.41		0.00
4"	0	0		187.49		0.00
Total	1,613	19,356			\$	202,714.56
	CCFT					
Volume:	106,864		\$	3.30	\$	352,651.20
Commercial						
Meter	Number	Number	P	resent		Present
Size	of Meters	of Bills	•	Rate		Revenue
<u>5/8</u> "	54	648	\$	10 27	\$	6 654 96
3/4"	ů,	0.0	•	14 61	•	0.00
1"	6	72		22.08		1 589 76
1 1/2"	5	60		39.81		2 388 60
2"	6	72		61 58		4 433 76
2" 3"	0	, <u>,</u>		114 41		0.00
۵"	0	0		187 49		0.00
-	Ū	Ŭ		107.40		0.00
Total	71	852			\$	15,067.08
	<u>CCFT</u>					
Volume:	10,371		\$	3.30	\$	34,224.30
Industrial						
Meter	Number	Number	P	resent		Present
<u>Size</u>	of Meters	of Bills		Rate		Revenue
5/8"	2	24	\$	10. 27	\$	246. 48
3/4"	0	0		14.61		0.00
1"	0	0		22.08		0.00
1 1/2"	0	0		39.81		0.00
2"	3	36		61.58		2,216.88
3"	0	0		114.41		0.00
4"	0	0		187.49		0.00
Total	5	60			\$	2,463.36
	<u>CCFT</u>					
Volume:	1,270		\$	3.30	\$	4,191.00

Pittsfield Aqueduct Company, Inc. Calculation of Revenues Under Present Rates

Municipal Meter Size 5/8" 3/4" 1" 1 1/2" 2" 3" 4"	Number of <u>Meters</u> 3 0 0 0 2 1 0	Number of <u>Bills</u> 36 0 0 24 12 0	P \$	resent <u>Rate</u> 10.27 14.61 22.08 39.81 61.58 114.41 187.49	\$ Present <u>Revenue</u> 369.72 0.00 0.00 0.00 1,477.92 1,372.92 0.00
Total	6	72			\$ 3,220.56
Volume:	<u>CCFT</u> 1,203		\$	3.30	\$ 3,969.90
Grand Tota	GWS Reven	ue			\$ 618,501.96

General Water Service - Combined Company - Continued

<u>Unmetered</u>

Number		Number	Present	Present	
	of Services	of Bills	Rate		Revenue
	10	120	\$ 33.09	\$	3,970.80
	39	468	21.68		10,146.24
Total	49	588		\$	14,117.04

Fire Protection Service - Combined Company

Private Fire Protection

0:	Nisaan aa	Number	Present	Present
Size	NUMDEr	of Bills	Rate	<u>Revenue</u>
4"	1	12	\$ 53.63	643.56
6"	9	108	153.91	16,622.28
8"	1	12	326.87	3,922.44
Totai	11	132		\$ 21,188.28

Municipal Fire Protection

<u>Size</u>	<u>Number</u>	of Bills		<u>Rate</u>	Revenue
Hydrant	65	780	\$	66.63	\$ 51,971.40
Inch-Feet	493,754	1,975,016	0	0.03510	69,323.06
Grand Total	Munipical F	ire Revenue	;		\$ 121,294.46

Pittsfield Aqueduct Company, Inc. Combined Company Summary of Revenues Under Present Rates

Description		<u>Amount</u>	<u>%</u>
GWS Volume Revenue GWS Customer Charge Revenue	\$ \$	395,036.40 223,465.56	50.97% 28.83%
Grand Total GWS Revenue	\$	618,501.96	79. 80%
Unmetered Service	\$	14,117.04	1.82%
Grand Total Private Fire Revenue	\$	21,188.28	2.73%
Grand Total Munipical Fire Revenue	\$	121,294.46	15.65%
Grand Total Revenue	\$	775,101.74	100.00%

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Pittsfield Aqueduct Company, Inc. Combined Company Rate Design

Municipal Fire Protection

Allocated Costs	\$ 223,138	
Number of Hydrants	65	
Annual Cost per Hydrant	\$ 3,432.89	
Monthly Cost per Hydrant	\$ 286.07	
Alternatively:		
Allocated Costs	\$ 223,138	
Present Revenue	\$ 121,294.46	
Increase Required	\$ 101,843.54	
	83.96	%

Rate Element	Present Charge	Developed <u>Charge</u>	% Increase
Hydrant	\$ 66.63	\$ 122.57	83.96 %
Inch-Foot	\$ 0.14040	\$ 0.25828	83.96 %

Pittsfield Aqueduct Company, Inc. Combined Company Rate Design

Private Fire Protection

Allocated Costs	\$ 36,259
Present Revenue	\$ 21,188.28
Increase Required	\$ 15,070.72

71.13 %

Rate Element	F	Present Monthly <u>Rate</u>		Developed Monthly <u>Rate</u>	% Increase	
4"	\$	53.63	\$	91.78	71.14	%
6"		153.91		263.39	71.13	%
8"		326.87		559.37	71.13	%

Pittsfield Aqueduct Company, Inc. Combined Company Rate Design

GWS Customer Charges (Minimum Charges)

Allocated Costs	\$	551,541
Present Revenue - Cust Chgs Present Revenue - Unmetered Svc	\$ \$	223,465.56 14,117.04
Present Revenue - Total Above	\$	237,582.60
Increase Required	\$	313,958.40

140.50 %

Rate Element	F	Present Nonthly <u>Rate</u>	Developed Monthly <u>Rate</u>	% Increase	
5/8"	\$	10.27	\$ 24.72	140.70	%
3/4"		14.61	35.16	140.66	%
1"		22.06	53.07	140.57	%
1 1/2"		39.81	95.76	140.54	%
2"		61.58	148.12	140.53	%
3"		114.41	275.18	140.52	%
4"		187.49	450.93	140.51	%
6"		373.98	899.44	140.50	%
8"		622.01	1,495.95	140.50	%

Pittsfield Aqueduct Company, Inc. Combined Company Rate Design

GWS Volumetric Rate

Pro Forma Net Revenue Requirement	\$ 1,729,316	
Revenue from Designed Rates		
Municipal Fire Protection	223,131	
Private Fire Protection	36,260	
Customer Charges (Minimum Charges)	537,845	
Unmetered - Partial	14,535	
Remaining from Volumetric Rate	\$ 917,545	
Annual Volume in 100 cu. ft.	122,158	
Designed Rate per 100 cu. ft.	\$ 7.51	

Rate Element	Present <u>Rate</u>		Developed Rate	% Increase	
Per 100 cu. ft.	\$ 3.30	\$	7:51	127.58	%

Note: For rate design purposes, an estimated annual use of 50 CCF has been used for each of the 49 existing unmetered customers.

Pennichuck East Utility, Inc. Combined Company Rate Design

GWS Unmetered Rate

For rate design purposes, it is estimated that each of the existing 49 unmetered customers would be served by a 5/8" meter and would use 50 CCF per year.

Unme	tered	Rate:
		the second s

Customer Cha	rge Portion:		
\$	24.72	12 Bills	\$ 296.64
Usage Portion:			
\$	7.51	50 CCF	\$ 375.50
Total Annual C	harge =		\$ 672.14
	•		
Monthly Charge	e		\$ 56.01

Pittsfield Aqueduct Company, Inc. Calculation of Revenues Under Developed Rates

General Water Service - Combined Company

Residential [.]						
Meter	Number	Number	De	eveloped		Developed
Size	of Meters	of Bills		Rate		Revenue
5/8"	1.597	19,164	\$	24.72	\$	473,734.08
3/4"	1	12	•	35.16	•	421.92
1"	8	96		53.07		5.094.72
1 1/2"	6	72		95.76		6.894.72
2"	1	12		148.12		1.777.44
3"	0	0		275.18		0.00
4"	Ō	0		450,93		0.00
Total	1,613	19,356			\$	487,922.88
	CCFT					
Volume:	106,864		\$	7.51	\$	802,548.64
Commercial						
Meter	Number	Number	De	eveloped		Developed
Size	of Meters	of Bills		<u>Rate</u>		Revenue
5/8"	54	6 48	\$	2 4 .72	\$	16,01 8.56
3/4"	0	0		35.16		0.00
1"	6	72		53.07		3,821.04
1 1/2"	5	60		95.76		5,745.60
2"	6	72		148.12		10,664.64
3"	0	0		275.18		0.00
4"	0	0		450.93		0.00
Total	71	852			\$	36,249.84
	<u>CCFT</u>					
Volume:	10,371		\$	7.51	\$	77.886.21
1						
moustnar	Number	Nh mahaa	D .			Developed
Neter	of Motors	Number	De	Reto		Developed
<u>Size</u>	<u>UI Meters</u>		¢	24.72	•	<u>Revenue</u>
3/6 2/4"	2	24	Ð	24.72	Þ	593.20
3/4 1"	0	0		53.10		0.00
1 1/2"	0	0		05.76		0.00
2"	3	36		148 12		5 332 32
3"	ő	0		275 18		0,002.02
4"	Ő	Ō		450.93		0.00
·	•	-				0.00
Total	5	60			\$	5,925.60
	CCFT			(175) (175) Al		
Volume [.]	1.270		\$	7.51	\$	9.537.70

Pittsfield Aqueduct Company, Inc. Calculation of Revenues Under Developed Rates

General Water Service - Combined Company - Continued

<u>Municipal</u>						
Meter	Number	Number	De	veloped		Developed
<u>Size</u>	of Meters	of Bills		<u>Rate</u>		<u>Revenue</u>
5/8"	3	36	\$	24.72	\$	889.92
3/4"	0	0		35.16		0.00
1"	0	0		53.07		0.00
1 1/2"	0	0		95.76		0.00
2"	2	24		148.12		3,554.88
3"	1	12		275.18		3,302.16
4"	0	0		450.93		0.00
Total	6	72			\$	7,746.96
	CCFT					
Volume:	1,203		\$	7.51	\$	9,034.53
Grand Tota	I GWS Revenu	10			¢	1 436 852 36
					Ψ	1,-00,002.00

Unmetered

	Number	Number	Developed		Developed	
	of Services	of Bills		Rate	Revenue	
	10	120	\$	56. 01	\$ 6,721. 20	
	39	468		56.01	26,212.68	
Total	49	588			\$ 32,933.88	

Fire Protection Service - Total Company

Private Fire Protection

<u>Size</u>	Number	Number <u>of Bills</u>	Developed Rate	Developed <u>Revenue</u>
4"	1	12	\$ 91.78	1,101.36
6"	9	108	263.39	28,446.12
8"	1	12	559.37	6,712.44
Total	11	132		\$ 36,259.92

Municipal Fire Protection

<u>Size</u> Hydrant Inch-Feet	<u>Number</u> 65 493,754	<u>of Bills</u> 780	\$	<u>Rate</u> 122.57 0.25828	\$ Developed <u>Revenue</u> 95,604.60 127,526.78
Grand Total	Munipical Fi	re Revenue	P		\$ 223,131.38

Pittsfield Aqueduct Company, Inc. Combined Company Summary of Revenues Under Developed Rates

Description	<u>Amount</u>	<u>%</u>
GWS Volume Revenue	\$ 899,007.08	51.99%
GWS Customer Charge Revenue	\$ 537,845.28	31.10%
Grand Total GWS Revenue	\$ 1,436,852.36	83.09%
Grand Total Unmetered Revenue	\$ 32,933.88	1. 91%
Grand Total Private Fire Revenue	\$ 36,259.92	2.10%
Grand Total Munipical Fire Revenue	\$ 223,131.38	12.90%
Grand Total Revenue under Developed Rates	\$ 1,729,177.54	100.00%
Net Revenue Requirement	1,729,316.00	
Difference	\$ (138.46)	
	-0.008% Negligible	