THE COMMONWEALTH OF MASSACHUSETTS

RETURN

OF

AQUARION WATER COMPANY OF MASSACHUSETTS

TO THE

DEPARTMENT OF PUBLIC UTILITIES

OF MASSACHUSETTS

For the Year Ended December 31, 2013

Name of Officer to whom correspondence should be addressed regarding this report,

Debra Kirven

Official Title

Controller

Office Address: **600 Lindley Street**

Bridgeport, CT 06606

General Information

Principal and Salaried Officers*

Titles	Names	Addresses	Annual Salaries
President Chief Executive Officer	Charles V. Firlotte	Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$381,502.53 * $21,529.68 charged to MA.
Vice President of Operations	John P. Walsh	Aquarion Water Company of Massachusetts, Inc. 900 Main St., Hingham, MA 02018	$167,389.46 * $94,755.66 charged to MA.
Executive Vice President, Treasurer, Secretary and Clerk	Donald J. Morrissey	Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$275,403.10 * $15,095.35 charged to MA.
Vice President Operations	Howard J. Dunn	Aquarion Water Company 600 Lindley Street Bridgeport, CT 06604 left company April 2013	$69,377.06 * $0 charged to MA.
Vice President Corporate Communications	Bruce T. Silverstone	Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$160,570.88 * $0 charged to MA.

Directors*

Names		Addresses	Fees Paid During Year
Howard J. Dunn		Aquarion Water Company 600 Lindley St., Bridgeport, CT 06606 left company April 2013	$0
Charles V. Firlotte		Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$0
Donald J. Morrissey		Aquarion Water Company 835 Main St., Bridgeport, CT 06604	$0

*By General Laws, Chapter 164, Section 83, the Return must contain a "List of names of all their salaried officers and the amount of the salary paid to each," and by Section 77, the department is required to include in its annual report "the names and addresses of the principal officers and of the directors."

Annual Report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

GENERAL INFORMATION

1. Full corporate title company: Aquarion Water Company of Massachusetts — Telephone No. (781) 740-6693
2. Location of principal business office: 900 Main Street Hingham, MA 02043
3. Date of organization: August 9, 1879 — 4. Date of incorporation: March 21, 1879
5. Whether incorporated under general or special law: Special
6. If under special law, give chapter and year of act: Chapter 139 Act of 1879
7. Give chapter and year of any subsequent special legislation affecting the Company: Chapters 59, 88, 54, 168, 482 of Acts 1881, 1886, 1910, 1914, and 1924 respectively
8. Territory covered by charter rights: Towns of Hingham, Hull, Millbury, Oxford, and parts of Cohasset and Norwell
9. Capital stock authorized by charter, $5,000,000
10. Capital stock issued prior to August 1, 1914, $300,000
11. Capital stock issued with approval of Board of Gas and Electric Light Commissioners or the Department of Public Utilities since August 1, 1914

37,571 shares of par value of $100.00 each	$3,757,100.00

12. If additional stock has been issued during the last fiscal period, give the date, amount and price thereof, the date or dates on on which the same was paid in, and the number of shares so sold and the amounts realized: _____D.P.U. No.

NONE

13. Management Fees and Expenses during the Year

List all individuals, associations, corporations or concerns with whom the company has any contract or agreement covering management or supervision of its affairs such as accounting, financing, engineering, construction, purchasing, operation, etc. and show the total amount paid to each for the year.

Aquarion Company	$100,519
Aquarion Water Company of Connecticut	$1,274,789

14. Date when Company first began to distribute and sell water: July 3, 1880
15. Total number of stockholders: One
16. Number of stockholders resident in Massachusettes: NONE
17. Amount of stock held in Massachusettes, number of shares , amount N/A

200

Annual Report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

COMPARATIVE GENERAL BALANCE SHEET

The entries in this balance sheet should be consitent with those in the supporting schedules on the pages indicated.
All credit items hereunder should be in red ink

Line No.	Balance at Beginning of Year (a)	Assets (b)	Balance at close of Year (c)	Net Change During Year (d)
1		**INVESTMENTS**		
2	$ 60,794,239	101-113 Plant Investments (p202)	$ 62,065,899	$ 1,271,660
3	$ 2,006,114	114-119 General Equipment (p202)	$ 1,822,246	$ (183,868)
4	$ 158,525	201 Unfinished Construction(p202)	$ 535,889	$ 377,364
5	$ 1,401	202 Miscellaneous Physical Property (p203)	$ 1,401	$ -
6	$ 7,592	203 Other Investments (p203)	$ 19,451	$ 11,859
7	**$ 62,967,871**	**Total Investments**	**$ 64,444,886**	**$ 1,477,014**
8		**CURRENT ASSETS**		
9	$ 102,498	204 Cash	$ 180	$ (102,318)
10	$ -	205 Special Deposits	$ -	$ -
11	$ 300,000	206 Notes Receivable	$ 2,200,000	$ 1,900,000
12	$ 1,110,974	207 Accounts Receivable	$ 1,012,707	$ (98,267)
13	$ -	208 Interest and Dividends Receivable	$ -	$ -
14	$ 273,232	209 Materials and Supplies	$ 278,445	$ 5,213
15	$ 2,098,477	210 Other Current Assets	$ 2,119,917	$ 21,440
16	**$ 3,885,181**	**Total Current Assets**	**$ 5,611,249**	**$ 1,726,068**
17		**RESERVE FUNDS**		
18	$ -	211 Sinking Funds	$ -	$ -
19	$ -	212 Insurance and Other Funds	$ -	$ -
20	**$ -**	**Total Reserve Funds**	**$ -**	**$ -**
21		**PREPAID ACCOUNTS**		
22	$ -	213 Prepaid Insurance	$ -	$ -
23	$ -	214 Prepaid Interest	$ -	$ -
24	$ 29,981	215 Other Prepayments	$ 60,060	$ 30,079
25	**$ 29,981**	**Total Prepaid Accounts**	**$ 60,060**	**$ 30,079**
26		**UNADJUSTED DEBITS**		
27	$ 236,030	216 Unamortized Dept Discount Exp (p203)	$ 210,639	$ (25,392)
28	$ -	217 Property Abandoned	$ -	$ -
29	$ 8,139,348	218 Other Unadjusted Debits (p203)	$ 5,993,771	$ (2,145,577)
30	**$ 8,375,378**	**Total Unadjusted Debits**	**$ 6,204,410**	**$ (2,170,968)**
31				
32	**$ 75,258,411**	**GRAND TOTAL**	**$ 76,320,605**	**$ 1,062,193**

201

Annual Report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2013**

COMPARATIVE GENERAL BALANCE SHEET

The entries in this balance sheet should be consitent with those in the supporting schedules on the pages indicated. All debit items hereunder should be in red ink.

Line No.	Balance at Beginning of Year (a)	Liabilities (b)	Balance at close of Year (c)	Net Change During Year (d)
1		**CAPITAL STOCK**		
2				
3	$ 3,757,100	301 Common Stock (p. 204)	$ 3,757,100	$ -
4	$ -	302 Preferred Stock (p. 204)	$ -	$ -
5	$ -	303 Employees' Stock (p. 204)	$ -	$ -
6	**$ 3,757,100**	**Total Capital Stock**	**$ 3,757,100**	**$ -**
7				
8	$ 1,135,450	304 Premium on Capital Stock	**$ 1,135,450**	$ -
9				
10		**BONDS, COUPON AND LONG TERM NOTES**		
11				
12	$ 19,478,898	305 Bonds (p. 204)	$ 19,320,000	$ (158,898)
13	$ -	306 Coupon and Long Term Notes (p. 204)	$ -	$ -
14	**$ 19,478,898**	**Total Bonds, Coupon and Long Term Notes**	**$ 19,320,000**	**$ (158,898)**
15				
16		**CURRENT LIABILITIES**		
17	$ -	307 Notes Payable (p. 205)	$ -	$ -
18	$ 655,088	308 Accounts Payable	$ 1,070,584	$ 415,496
19	$ 748	309 Consumers' Deposits	$ 536	$ (212)
20	$ -	310 Matured Interest Unpaid	$ -	$ -
21	$ -	311 Dividends Declared	$ -	$ -
22	$ -	312 Other Current Liabilities	$ -	$ -
23	**$ 655,836**	**Total Current Liabilities**	**$ 1,071,120**	**$ 415,284**
24				
25		**ACCRUED LIABILITIES**		
26	$ (91)	313 Tax Liability	$ (91)	$ -
27	$ 150,960	314 Interest Accrued	$ 152,639	$ 1,679
28	$ 102,449	315 Other Accrued Liabilities	$ 95,296	$ (7,153)
29	**$ 253,318**	**Total Accrued Liabilities**	**$ 247,844**	**$ (5,474)**
30				
31		**UNADJUSTED CREDITS**		
32	$ 61,659	316 Premium on Bonds (p. 205)	$ 55,875	$ (5,784)
33	$ 9,209,304	317 Other Unadjusted Credits (p. 205)	$ 4,598,545	$ (4,610,759)
34				
35	**$ 9,270,963**	**Total Unadjusted Credits**	**$ 4,654,420**	**$ (4,616,543)**
36				
37		**RESERVES**		
38	$ -	318 Insurance and Casualty Reserve	$ -	$ -
39	$ 13,982,671	319 Depreciation Reserve (p. 206)	$ 14,890,736	$ 908,065
40	$ 5,187,938	320 Other Reserves	$ 8,434,314	$ 3,246,376
41	**$ 19,170,609**	**Total Reserves**	**$ 23,325,050**	**$ 4,154,441**
42				
43		**APPROPRIATED SURPLUS**		
44	$ -	321 Sinking Fund Reserves	$ -	$ -
45	$ 12,085,878	323 Contributions for Extensions	$ 11,997,004	$ (88,874)
46	$ 3,844,050	324 Surplus Invested in Plant	$ 3,844,050	$ -
47	**$ 15,929,928**	**Total Appropriated Surplus**	**$ 15,841,054**	**$ (88,874)**
48				
49	$ 5,606,309	400 Profit and Loss Balance (p. 301) +	$ 6,968,568	$ 1,362,258
50	**$ 21,536,237**	**Total Corporate Surplus +**	**$ 22,809,622**	**$ 1,273,384**
51	**$ 75,258,411**	**GRAND TOTAL**	**$ 76,320,605**	**$ 1,062,194**

Annual Report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

PLANT INVESTMENT ACCOUNTS

Show for all items of plant, classified in accordance with the prescribed Uniform System of Accounts, the particulars called for by the column headings Credits in column (d) for plant retired during the year should be fully explained in a footnote. Col. (e). "Adjustments made during the year, "should be interpreted to mean modifications of entries made in prior accounting periods. When any adjusting entry is made in Col. (e), the credit to the account should be shown in red; in case the amount is transferred to some other account in the same schedule, the debit amount should appear in the same column in black.

When the whole or any part of "Unfinished Construction" is transferred to the Plant accounts, the amounts transferred should appear in Col. (e) in red and the amounts debited should appear in Col. (c) in black.

Line No.	NAME OF ACCOUNT (a)	Balance at Beginning of Year (b)	Additions During Year (c)	Plant Retired During Year (d)	Adjustments During Year (e)	Balance at Close of Year (f)
1	**INTANGIBLE PROPERTY**					
2	Organization	82,595	-	-	-	82,595
3	Misc. Intangible Invest.	-	-	-	-	-
4	**Total Intangible Property**	**82,595**	**-**	**-**	**-**	**82,595**
5	**TANGIBLE PROPERTY**					
6	Land	243,845	-	-	-	243,845
7	Structures	15,592,230	77,512	(22,606)	-	15,647,136
8	Pumping Plant Equipment	1,487,376	72,738	(12,140)	-	1,547,974
9	Misc. Pumping Plant Equipment	124,477	-	(6,831)	-	117,646
10	Purification System	2,600,250	241,335	(29,072)	-	2,812,513
11	Trans'n and Dist'n Mains	29,733,588	874,362	(33,064)	-	30,574,886
12	Services	6,814,318	193,890	(4,377)	-	7,003,831
13	Consumers' Meters	2,200,500	242,355	(364,456)	-	2,078,399
14	Consumers' Meter Installation	672,540	-	-	-	672,540
15	Hydrants	482,346	28,935	(2,700)	-	508,580
16	Fire Cist'ns, Basins, Fount'ns				-	-
17	Water Rights				-	-
18	Other Trans'n & Dist'n Plant	760,174	15,779	-	-	775,953
19	Miscellaneous Expenditures				-	-
20	**Total Plant Investment**	**60,711,644**	**1,746,905**	**(475,245)**	**-**	**61,983,304**
21	**GENERAL EQUIPMENT**					
22	Office Equipment	529,752	32,436	(15,989)	-	546,199
23	Shop Equipment	318,382	9,245	(68,947)	-	258,680
24	Stores Equipment	132,056	-	(1,352)	-	130,704
25	Transportation Equipment	621,958	7,474	(16,177)	-	613,255
26	Laboratory Equipment	52,792	-	(16,787)	-	36,005
27	Miscellaneous Equipment	351,174	-	(113,771)	-	237,403
28	**Total General Equipment**	**2,006,114**	**49,155**	**(233,023)**	**-**	**1,822,246**
29	Unfinished Construction	158,525	2,173,424	-	(1,796,060)	535,889
30	**Total Cost of All Property**	**62,958,877**	**3,969,484**	**(708,268)**	**(1,796,060)**	**64,424,034**
31	Assessed Value of Real Estate	15,836,075	77,512	(22,606)	-	15,890,981
32	Assessed Value of Other Property	46,881,684	1,718,548	(685,662)	-	47,914,570
33	**Total Assessed Value**	**62,717,758**	**1,796,060**	**(708,268)**	**-**	**63,805,551**

MISCELLANEOUS PHYSICAL PROPERTY

Give particulars of all investments of the respondent in physical property not devoted to utility operation.

Line No.	DESCRIPTION AND LOCATION OF MISCELLANEOUS PHYSICAL PROPERTY HELD AT END OF YEAR (a)	Book Value at End of Year (b)	Revenue for the Year (c)	Expense for the Year (d)	Not Revenue for the Year (e)
1	Easement Right-of-Way	$1,401			$1,401
2					
3					
4					
5	**Totals**	$1,401			$1,401

OTHER INVESTMENTS

Give particulars of investments in stocks, bonds, etc., held by the respondent at end of year.

(a)

6	Investment in CoBank, ACB	$7,592.00	$11,859.00		$19,451.00
7					
8					
9					
				Total	**$19,451.00**

UNAMORTIZED DEBT DISCOUNT AND EXPENSE

Give an analysis of the respondent's accodiscount and (or) expense on bonds, coupon or short term notes. If the account represents only the expenseincurred in connection with the issue, the word "Discount" should be erased. Entries in Col (d) should be consistant with the returns made on page 301, Schedules of Income and Profit and Loss.

	NAME OF SECURITY (a)	Unextinguished Discount at Beginning of Year (b)	Discount on Bonds etc., Issued During Year (c)	Discount Written off During Year (d)	Unextinguished Discount at Close of Year (e)
10	General Mtg Bonds 7.71%	$ 32,290		$ 2,958	$ 29,332
11	General Mtg Bonds 9.64%	$ 19,335		$ 2,148	$ 17,187
12	MA Water Pollution Abatement Trust Loan - 0.0%	$ 31,595		$ 2,985	$ 28,609
13	CoBank, ACB Swap 4.11%	$ 152,811	$ -	$ 17,299	$ 135,511
14					
15	**TOTALS**	**$ 236,030**	**$ -**	**$ 25,391**	**$ 210,639**

OTHER UNADJUSTED DEBITS

Give an analysis of the abvove-entitled account as of close of year, showing in detail each item or subaccount amounting $500 or more. Items less than '$500 may be combined in a single entry "Minor Items _____ in number, each less than $500," giving the number of items thus combined.'

	DESCRIPTION AND CHARACTER OF UNADJUSTED DEBITS	Balance at Beginning of Year (b)	Amount Added During Year (c)	Amount Written off During Year (d)	Balance at Close of Year (e)
16	Deferred Taxes	$ 355,683	$ 4,491,121	$ 1,730,154	$ 3,116,650
17	Deferred Pension	$ 999,020	$ 300,197	$ 367,581	$ 931,636
18	Deferred FAS 106	$ 691,170	$ 108,887	$ 256,088	$ 543,969
19	Deferred Rate Proceedings	$ 322,003	$ -	$ 143,112	$ 178,891
20	Deferred Perchlorate Costs	$ 12,554	$ -	$ 3,863	$ 8,691
21	Additional Security Costs	$ 134,324	$ -	$ 41,330	$ 92,994
22	FAS 158 Deferred Debits	$ 5,366,260	$ -	$ 4,409,792	$ 956,468
23	Deferred Well Maintenance	$ 62,049	$ 19,906	$ 26,530	$ 55,425
24	Deferred Town of Oxford - Litigation Costs	$ 196,285	$ -	$ 87,238	$ 109,047
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35	**TOTALS**	**$ 8,139,348**	**$ 4,920,111**	**$ 7,065,688**	**$ 5,993,771**

CAPITAL STOCK

Give particulars of the various issues of capital stock of the respondent, as called for in the following schedule. In stating the amount of Capital Stock authorized in Col. (d) show only the amount authorized by the regulatory body.

Line No.	Decription (a)			Number of Shares Authorized (b)	Par Value of One Share (c)	Amount of Capital Stock Authorized (d)		Amount Actually Out-standing at End of Year (e)	Total Premium At End of Year (f)
1	Capital Stock: Common			50,000	$ 100		$ 5,000,000	$ 3,757,100	$ 4,979,500
2	Preferred								
3	Employee								
4									
5		**Totals**					**$ 5,000,000**	**$ 3,757,100**	**$ 4,979,500**

BONDS, COUPONS, AND LONG TERM DEBT

Give particulars of various issues of bond, coupons, and long term notes as called for in the following schedule, giving the names of any underlying issues that may have been assumed by the respondent. The total of col. (h) should be consistant with return made on page 301, Income Schedule (line 20).

	NAME AND CHARACTER OF OBLIGATION (a)	Date of Issue (b)	Date of Maturity (c)	Par Value Authorized (d)	Par Value Actually Outstanding at End of Year (e)	INTEREST PROVISIONS Rate Per Cent (f)	Dates Due (g)	Interest Accrued During Year Charged to Income (h)	Interest Paid During Year (i)
6	Mortgage Bonds:								
7	General Mortgage	11/93	6/23	$ 7,000,000	$ 7,000,000	7.71%	Jun/Dec	$ 539,700	$ 539,700
8	General Mortgage	12/91	9/21	$ 1,400,000	$ 1,400,000	9.64%	Mar/Sep	$ 134,960	$ 134,960
9	MA Water Pollution Abatement Trust Loan	03/03	08/23	$ 1,920,000	$ 1,920,000	0.00%	-	$ -	$ -
10	General Mortgage - swap loan	11/11	11/21	$ 9,000,000	$ 9,000,000	4.11%	Feb/May/Aug/Nov	$ 376,717	$ 375,037
11	**Total Bonds**			**$ 19,320,000**	**$ 19,320,000**			**$ 1,051,377**	**$ 1,049,697**
12	Coupon and Long Term Notes:								
13									
14									
15									
16									
17	Total Coupon & Long Term Notes								
18		**Grand Total**					**Totals**	**$ 1,051,377**	**$ 1,049,697**

SUNDRY CURRENT LIABILITIES

NOTES PAYABLE

Line No.	Name of Creditor (a)	Date of Issue (b)	Date of Maturity (c)	How Secured (d)	Rate of Interst (e)	Amount (f)
1	Aquarion Company					$ -
2						
3						
4						
5						
6						
7						
8					**TOTAL**	**$ -**

PREMIUM ON BONDS

Give an analysis of the respondent's accounts covering premium on bonds or other evidences of indebtedness. Entries in Col. (d) should be consistent with the returns made on page 301. Schedule of Income and Profit and Loss

	NAME OF SECURITY (a)		Unextinguished Premium at Beginning of Year (b)	Premium on Bonds Issued During Year (c)	Premium Written Off During Year (d)	Unextinguished Premium at End of Year (e)
9	MWPAT Unamortized Premium					$ 55,875
10						
11						
12		**TOTALS**				**$ 55,875**

OTHER UNADJUSTED CREDITS

Give the names in Col. (a) and indicate the character, in Col. (b) of the several subaccounts which appear as "Other Unadjusted Credits." For items less than $1,000 a single entry may be made under the caption "Minor accounts..... in number, each less than $1,000," stating the number

	NAME OF SUBACCOUNT (a)	Character of Subaccount (b)	Amount (c)
13	Advances for Construction		$ 365,322
14	Deferred OPEB		$ 657,142
15	Deferred Pension		$ 3,358,219
16	Unrealized (gain) loss on swap		$ (192,138)
17	Tax benefit due ratepayer		$ 410,000
18			
19			
20			
21			
22			
23		**Total**	**$ 4,598,545**

206

Annual Report of Aquarion Water Company of Massachusetts **Year Ended December 31, 2013**

DEPRECIATION RESERVE

Line No.	(a)	Amount (b)
1	**Balance at beginning of year**	13,982,671
2	Credits to Depreciation Reserve during year:	
3	Account 610-10 Depreciation	1,612,079
4	Other Accounts (Specify):	
5	Loss of Disposition of Assets	
6	Depreciation charged to contributed property schedule	
7	Rate Case adjustment to accumulated depreciation per Docket No. - D.P.U. 1	-
8	**CHARGES DURING YEAR**	**1,612,079**
9	Net Charges for Plant Retired:	
10	Book Cost of Plant Retired	708,268
11	Cost of Removal	-
12	Salvage (credit in red)	(4,254)
13	**NET CHARGES DURING YEAR**	**704,014**
14	**Balance at end of year**	**14,890,736**

BASIS OF DEPRECIATION CHARGES

Give in detail the rules and rate by which the respondent determined the amount charged to operating expenses and other accounts, and credited to Depreciation Reserves. report also depreciation taken for the year for federal income tax purposes.

15		
16		
17		
18		
19		
20		

301

Annual Report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2013**

INCOME STATEMENT FOR THE YEAR

Give the Income Account of the respondent for the year ended December 31, 2011 in accordance with the Uniform System of Accounts for Water Companies.

Line No.	Acc't No.	Item (a)	Amount (b)	Comparison with Previous Year. (c)
1		**OPERATING INCOME**		
2	500	Operating Revenues (p. 302)	$ 15,671,535	$ (413,410)
3	600	Operating Expenses (p. 303)	$ 12,981,962	$ (111,590)
4		**Net Operating Revenues**	**$ 2,689,573**	**$ (301,820)**
5	550	Uncollectible Operating Revenues	$ 39,890	$ 10,529
6	551	Taxes (p. 303B)	$ 331,748	$ (937,163)
7		**Net Operating Income**	**$ 2,317,935**	**$ 624,814**
8		**NON-OPERATING INCOME**		
9	560	Mdse. and Jobbing Revenue*	$ 52,742	$ 5,142
10	561	Rent from Appliances	$ -	$ -
11	562	Miscellaneous Rent Income	$ -	$ -
12	563	Interest and Dividend Income	$ -	$ -
13	564	MWPAT Loan - Net Subsidy	$ 9,165	$ 4,779
14	565	MWPAT Amortization of Debt Premium	$ 5,784	$ -
15	566	Miscellaneous Non-operating Income	$ 103,036	$ 6,206
16		**Total Non-operating Income**	**$ 170,727**	**$ 16,127**
17		**GROSS INCOME**	**$ 2,488,662**	**$ 640,941**
18		**DEDUCTIONS FROM GROSS INCOME**		
19	575	Miscellaneous Rents	$ -	$ -
20	576	Interest on Bonds and Coupon Notes	$ 1,054,808	$ (21,151)
21	577	Miscellaneous Interest Deductions	$ -	$ -
22	578	Amortization of Discount (p. 203)	$ 25,391	$ -
23	579	Miscellaneous Deductions from Income	$ 18,690	$ (300,539)
24		**Total Deductions from Gross Income**	**$ 1,098,889**	**$ (321,690)**
24		**Income Balance transferred to Profit and Loss**	**$ 1,389,773**	**$ 962,631**

PROFIT AND LOSS STATEMENT

Show hereunder the items of the Profit and Loss Account of the respondent, classified in accordance with the Uniform System of Accounts for Water Companies.

Line No.	Acc't No.	Item (a)	Debits (b)	Credits (c)
26		**CREDITS**		
27	401	Credit Balance at Beginning of Fiscal Period (p.201)		$ 5,606,309
28	402	Credit Balance transferred from Income Acct. (p.301)		$ 1,389,773
29	403	Miscellaneous Credits, (transfer from paid-in-capital)		$ -
30		**DEBITS**		
31	411	Debit Balance at Beginning of Fiscal Period (p.201)		
32	412	Debit Balance transferred from Income Acct. (p.301)		
33	413	Accumulated other comprehensive gain on swap		$ 661,985
34	414	Dividend Appropriation of Surplus (p.302)	$ 689,500	
35	415	Appropriations of Surplus for Depreciation (p.204)		
36	416	Dic'nt on Bonds Exting'd through Surplus (p.203)		
37	417	Other Deductions from Surplus for Depreciation (p.204)		
38	418	Appropriations of Surplus for Construction		
39		Balance carried Forward to Balance Sheet		$ 27,515
		TOTALS		**$ 6,968,568**

(Note) Explain below amounts entered as Other Deductions from Surplus or Miscellaneous Credits:

*In case the Merchandising and Jobbing business shows a loss, the amount should appear in red.

Annual Report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2013**

OPERATING REVENUES

State the operating revenues of the respondent for the year ended December 31, 2011, classified in accordance with the Uniform System of Accounts.

Line No.	Acc't No.	CLASS OF WATER OPERATING REVENUE	Amount of Revenue for Year	Comparison with Previous Year
1		**REVENUES FROM SALE OF WATER**		
2	501	Metered Sales to General Consumers	$ 14,066,391	$ (491,187)
3	502	Flat-rate Sales to General Consumers	$ 654,973	$ 49,551
4	503	Sales to Other Water Companies	$ -	$ -
5	504	Municipal Hydrants	$ 892,192	$ 7,660
6	505	Miscellaneous Municipal Revenues	$ -	$ -
7		**Total Revenues from Water Operations**	**$ 15,613,556**	**$ (433,976)**
8		**MISCELLANEOUS REVENUES**		
9	506	Rent from Property used in Operation	$ -	$ -
10	507	Miscellaneous Operating Revenues	$ 57,979	$ 20,566
11		**Total Revenues from Miscellaneous Operation**	**$ 57,979**	**$ 20,566**
12		**Total Operating Revenues**	**$ 15,671,535**	**$ (413,410)**

DIVIDENDS DECLARED DURING THE YEAR

Give particulars of dividends on each class of stock during the year, and charged to Profit and Loss. This schedule shall include only dividends that have been declared by the Board of Directors during the fiscal year.

Line No.		NAME OF SECURITY ON WHICH DIVIDEND WAS DECLARED (a)	RATE PER CENT Regular (b)	RATE PER CENT Extra (c)	Amount of Capital Stock on which Dividend was Declared (d)	Amount of Dividend (e)	DATE Declared	DATE Payable
13		Common Stock				$ 689,500		
14								
15								
16								
17								
19								
20								
21								
22								
23								
24		**Totals**				$ 689,500		

303

Annual Report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2013**

OPERATING EXPENSES

(For companies having average operating revenues of more than $15,000.)

State the operating expenses of the respondent for the year ended December 31, 2011classifying them in accordance with the Uniform System of Accounts.

Line No.	Acc't No.	Item (a)	Amount (b)	Comparison with Previous Year. (c)
1		**SOURCE OF WATER SUPPLY EXPENSES**		
2	601-1	Maintenance of Water Supply Buildings and Fixtures	$ 41,330	$ -
3	601-2	Maintenance of Surface Source of Supply Facilities	$ -	$ -
4	601-3	Maintenance of Ground Source of Water Supply	$ 82,226	$ (6,465)
5		**Total Source of Water Supply Expenses**	**$ 123,556**	**$ (6,465)**
6	602	**Water Purchased for Resale**	**$ 91,813**	**$ 79,848**
7		**PUMPING EXPENSES**		
8	603-1	Pumping Labor	$ 138,513	$ 8,156
9	603-2	Boiler Fuel	$ -	$ -
10	603-3	Water for Steam	$ -	$ -
11	603-4	Electric Power Purchased	$ 711,341	$ 102,909
12	603-5	Miscellaneous Pumping Station Supplies and Expenses	$ 135,224	$ (28,257)
13	604-1	Maintenance Power Pumping Buildings and Fixtures	$ 28,026	$ 1,970
14	604-2	Maintenance of Pumping Equipment	$ 91,969	$ (41,386)
15	604-3	Maintenance of Miscellaneous Pumping Plant Equipment	$ -	$ -
16		**Total Pumping Expenses**	**$ 1,105,073**	**$ 43,392**
17		**PURIFICATION EXPENSES**		
18	605-1	Purification Labor	$ 277,766	$ 10,506
19	605-2	Purification Supplies and Expenses	$ 3,311,742	$ (585,183)
20	606-1	Maintenance of Purification Buildings and Fixtures	$ 21,912	$ (24,224)
21	606-2	Maintenance of Purification Equipment	$ 245,863	$ 9,334
22		**Total Purification Expenses**	**$ 3,857,283**	**$ (589,567)**
23		**TRANSMISSION AND DISTRIBUTION EXPENSES**		
24	607	Inspecting Customers' Installation	$ 22,069	$ 7,000
25	608	Miscellaneous Trans. and Dist, Supplies and Expenses	$ 497,527	$ 30,464
26	609-1	Maintenance of Trans. and Dist. Buildings and Fixtures	$ 3,956	$ 672
27	609-2	Maintenance of Trans. and Dist. Mains	$ 360,149	$ (55,267)
28	609-3	Maintenance of Storage, Reservoirs, Tanks and Standpipes	$ 1,594	$ (2,228)
29	609-4	Maintenance of Services	$ 179,527	$ 29,312
30	609-5	Maintenance of Meters	$ 91,987	$ 5,905
31	609-6	Maintenance of Hydrants	$ 16,133	$ 4,961
32	609-7	Maintenance of Fountains and Troughs	$ -	$ -
33		**Total Trans. and Dist. Expenses**	**$ 1,172,942**	**$ 20,819**
34		**GENERAL AND MISCELLANEOUS EXPENSES**		
35	610-1	Salaries of General Officers and Clerks	$ 507,363	$ (14,033)
36	610-2	General Office Supplies and Expenses	$ 2,124,435	$ 40,127
37	610-3	Law Expense - General	$ 888,921	$ 596,385
38	610-4	Insurance	$ 967,831	$ 11,188
39	610-5	Accidents and Damages	$ -	$ -
40	610-6	Store Expenses	$ -	$ -
41	610-7	Transportation Expenses	$ 33,155	$ 927
42	610-8	Inventory Adjustments	$ -	$ -
43	610-9	Maintenance of General Structures	$ -	$ -
44	610-10	Depreciation	$ 1,407,912	$ 30,365
45	610-11	Miscellaneous General Expenses	$ 701,678	$ (324,576)
46		**Total General and Miscellaneous Expenses**	**$ 6,631,295**	**$ 340,383**
47		**GRAND TOTAL OPERATING EXPENSES**	**$ 12,981,962**	**$ (111,590)**

303B

Annual Report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

OPERATING EXPENSES (CONT'D)

(For companies having average operating revenues not exceeding $15,000.)

State the operating expenses of the respondent for the year ended December 31, 2011 classifying them in accordance with the Uniform System of Accounts.

Line No.	Kind of Tax (a)	Federal	State	Municipal	Total
48	FIT	$ (729,449)			$ (729,449)
49	FICA	$ 154,355			$ 154,355
50	FUTA	$ 1,015			$ 1,015
51	Property Tax			$ 1,051,389	$ 1,051,389
52	SUTA		$ 11,722		$ 11,722
53	SIT		$ (157,284)		$ (157,284)
54	Other General Taxes			$ -	$ -
55					
56					
57					
58					
59					
60	**TOTALS**	**$ (574,079)**	**$ (145,562)**	**$ 1,051,389**	**$ 331,748**

Annual report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2013**

Real Estate Information - Hingham

1. Land owned by the Company

	Location	Use	
A	Whiting Street, Accord Pond	Surface water supply, pump station, elevated tank	
B	South Pleasant Avenue Fulling Mill	Water Pump Station Distribution Tank	
C	Free Street	Well Stations	
D	Turkey Hill Lane	Standpipe	
E	Downing Street	Well Station	
F	Scotland Street	Well Station	
G	Prospect Street	Well Station	

	Area	When Bought	Cost
A	43.53 Acres	1882, 85, 96, 97, 98, 1916	$10,177
B	117.04 Acres	1885, 1900, 02-06, 16, 23	$29,092
C	72.14 Acres	1942, 1951	$3,763
D	0.22 Acres	1963	$4,766
E	10.91 Acres	1965	$14,579
F	24.20 Acres	1955 - 1975	$7,596
G	9.22 Acres	1966 - 1970	$83,384

2. Buildings owned by the Company

	Location	Use
A	Fulling Mill Pond	Pump Station
B	Fulling Mill Pond	Storehouse and Garage
C	Accord Pond - Gravity & Pump	Outlet Structure and Pump Station
D	Free Street #4	Pump Station
E	Free Street #3	Pump Station
F	Free Street #2	Filter Building And Garage, Pump Station
G	Scotland Street	Pump Station
H	Downing Street	Pump Station
I	Prospect Street	Pump Station

	Size	Material	When Built	Cost
A	5755	Brick	1919, 20, 21, 62, 67, 68, 96	
B	800	Steel	1969	
C	1200	Brick	1995	
D	450	Brick	1942 - 1968	
E	258	Brick	1952	
F	2780	Brick & Block	1969-70	
G	326	Cement Block	1956	
H	340	Cement Block	1966	
I	360	Brick & Block	1971	

* By cost is meant the original cost of Installation, not the Book Value

Real Estate Information - Millbury

1. Land owned by the Company

	Location	Use
A	Millbury Avenue	Location of Well & Pump Station
B	Burbank Hill	Location of Reservoir
C	Howe Avenue	Location Basins #1, #2 & #3
D	Oak Pond Avenue	Oak Pond Pump Station
E	North Main Street @ Jacques Curve	#1 & #2 North Main Street Pump Station
F	Sutton Road	Location of Booster Station

	Area	When Bought	Cost
A	3.00 Acres	1849	
B	3.00 Acres	1895	$25,802
C	55.23 Acres	1895 - 1913	$3,823
D	97,129 Square Feet	1957	$4,106
E	20.39 Acres	1965	$16,824
F	10,051 Square Feet	1994	$12,000

	Location	Use
A	Oak Pond Avenue	Pump Station
B	North Main Street #2 Well	Pump Station
C	North Main Street #1 Well	Pump Station
D	34 Sutton Road	Booster Pump Station

	Size	Material	When Built	Cost
A	19' x 16'	Concrete Block	1958	
B	20' x 17'	Concrete Block	1966	
C	20' x 17'	Concrete Block	1966 - 67	
D	17' x 22'	Brick & Concrete	1994	

* By cost is meant the original cost of Installation, not the Book Value

Annual report of Aquarion Water Company of Massachusetts — **Year ended December 31, 2013**

Real Estate Information -Oxford

1. Land owned by the Company

	Location		Use	
A	Main St, Oxford, MA		Well & Pump station	
B	Prospect Hill, Oxford, MA		Right of way for standpipe	
C	Prospect Hill, Oxford, MA		Land adjacent to standpipe	
D	Off Holbrook Road- Oxford, Massachusetts		Land for standpipe	
E	From Old Depot Rd to Burbank St Oxford, Mass		Right of way pipeline to standpipe	
	Area		**When Bought**	**Cost**
A	9.04 Acres		1906	$4,312
B	1.00 Acre		1907	$319
C	13.30 Acres		1944	$438
D	0.52 Acres		1957	$6,527
E	25.70 Acres		1958 - 1959	$16,338

2. Buildings owned by the Company

	Location		Use	
A	North Main Street Oxford, Massachusetts		Pump Station	
B	North Main Street Oxford, Massachusetts		Pump Station	
C	Off Nelson Street Oxford, Massachusetts		Pump Station	
D	Sutton Ave. Oxford, Massachusetts		Booster Pump Station	
	Size	**Material**	**When Built**	**Cost**
A	20' x 17'	Cement Block	1959	
B	20' x 17'	Cement Block	1959	
C	16' x 10' x 19'9"	Cement Block	1959-64-67	
D	12' x 20'	Prefab. Metal	1999	

* By cost is meant the original cost of Installation, not the Book Value

SUPPLY INFORMATION - Hingham

1. Give a full and complete description of the sources from which water is obtained. State whether these sources are owned or leased by the Company. If they are leased, quote the terms of the lease. Give the date of the latest opinion of the Department of Public Health regarding each of these sources of supply.

See attached Schedule

2. Watersheds owned by the Company

Location	Area	When Bought	Cost
A. Fulling Mill Pond	67.79 acres	1902, 04, 06, 23	Included on page 400
B. Accord Pond	40.916 acres	1882, 85-87	

Remarks:

3. Give a full and complete description of any water supply rights that are owned by the company and state when they were bought and what was paid for them.

Fulling Mill Pond - January 4, 1886 - $2,000
Accord Pond - May 26, 1912 - $1,500

Water registration for withdrawal of water issued by Commonwealth of Massachusetts in 1988 and renewed in 1998 and 2008.

(Item 1 Page 401)
Annual Report of Aquarion Water Company of Massachusetts

Year ended December 31, 2013

Give a full and complete description of the source or sources from which water is obtained. State whether these sources are owned or leased by the Company. If they are leased, quote the terms of the leases. Give the date of the latest opinion of the Department of Public Health regarding each of these sources of supply.

Water is obtained from Accord Pond, Fulling Mill Well and from several other wells. Fulling Mill Well is owned by respondent. The right to withdraw water from all sources was registered under the Massachusetts Water Management Act of 1988. Two satellite wells, Fulling Mill #1 & #2, both 18" diameter ,#1 is 48' deep and #2 is 42' deep, were added at Fulling Mill An 18" diameter well, 58' deep was constructed off Prospect Street in 1971. The well was approved by the Department of Public Health in 1970. A 24" diameter well, Free Street #2, 72' deep, was constructed off Free Street in 1951, the pump was installed in 1952. A replacement well 18" in diameter and 80' deep for #2 , Free St. #2A, was put into service in December 2007. An 18" diameter well, 45' deep, was constructed off Scotland Street in 1955. An 24" satellite well, Scotland St. #1A, 58' deep, was completed and put into service in May 2008. A 24"diameter well, 66' deep was constructed off Downing Street in 1965, pump installed in 1966, Free Street Well #3, 88' 8" deep, was constructed adjacent to Free Street Well #1 in 1967, the pump was installed in 1998. Testing and approval by the Department of Public Health was not required as this well was in same well field as Free Street Well #1. Free Street #1 has been abandoned since late in the 1960's; it has been filled and capped. The land around this well is leased for a 99 year term at no cost other than payment of real estate taxes. A 24" diameter well 86' deep, Free Street #4 was completed in December, 1982, and Department of Environmental approval was given in 2008. Free Street Well #5 is a 16" diameter well which was constructed in 2001 as a satellite well to Free Street Well #3. All sources are sampled in accordance with state and federal regulations. All sources are currently in compliance with those regulations.

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

SUPPLY INFORMATION - Millbury

1. Give a full and complete description of the sources from which water is obtained. State whether these sources sre owned or leased by the Company. If they are leased, quote the terms of the lease. Give the date of the latest opinion of the Department of Public Health reguarding each of these sources of supply.

Water is supplied from four wells all owned by the Company. All are approved public drinking water sources according to Massachusetts DEP.

2. Watersheds owned by the Company

Location	Area	When Bought	Cost
A. Parcel E & F - Howe Ave	8.50 acres	1909	Included on page 400
B. Parcel G, West of E & F - Howe Ave	29.29 acres	1910	
C. West of G - Howe Ave	3.18 acres	1913	

Remarks:

3. Give a full and complete description of any water supply rights that are owned by the company and state when they were bought and what was paid for them.

Water registration for withdrawal of water issued by Commonwealth of Massachusetts in 1988 and renewed in 1998 and 2008.

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

SUPPLY INFORMATION - Oxford

1. Give a full and complete description of the sources from which water is obtained. State whether these sources sre owned or leased by the Company. If they are leased, quote the terms of the lease. Give the date of the latest opinion of the Department of Public Health reguarding each of these sources of supply.

The responent owns three gravel packed wells. All wells are approved for use as public water supply sources of the Massachusetts DEP.

2. Watersheds owned by the Company

Location	Area	When Bought	Cost
A.			
B.			
C.			
D.			

Remarks:

3. Give a full and complete description of any water supply rights that are owned by the company and state when they were bought and what was paid for them.

Water registration for withdrawal of water issued by Commonwealth of Massachusetts in 1988 and renewed in 1998 and 2008.

SUPPLY INFORMATION - Continued - Hingham

4. Wells

Location	Inside Dimensions	Depth Below High Water	Covered or Uncovered	When Built	Cost
A. Fulling Mill Well	40' x 19'	21' 8"	Covered	1903	
B. Free Street Well #2	24"	73"	Covered	1951	
C. Scotland Street Well	18"	45"	Covered	1955	
D. Dowing Street Well	24"	66' 6"	Covered	1966	Combined
E. Free Street Well #3	18'	88' 6"	Covered	1967	
F. Prospect St. Well	18"	58'	Covered	1971	
G. Free Street Well #4	24"	86'	Covered	1982	
H. Free Street Well #5	16"	68'3"	Covered	2001	$354,696
I. Free Street Well #2A	12"	80'	Covered	2007	$265,151
J. Fulling Mill Well #1	12"	48'	Covered	2008	$244,244
K. Fulling Mill Well #2	12"	42'	Covered	2008	$222,268
L. Scotland St. Well #1A	18"	58'	Covered	2008	$348,459

5. Give a full and complete description of the wells

See attached sheet

6. Reservoirs

Location	Area at Surface When Full	Full Capacity in Gallons		When Built	Cost
A. Accord Pond	100 Acres	247,000,000			
B. Fulling Mill Pond	14 acres	23,109,000			
C. Fulling Mill Basin	Undetermined				

7. Describe the reservoirs, stating to what extent they are artificial; to what extent their bottons were cleaned before being put into service; to what extent their slopes and bottoms are paved; what provisions have been made for raising the water level and increasing the capacity; and give the character of construction of any dams.

Accord Pond is a natural lake. At natural outlet an embankment was built with concrete core walls. Fulling Mill is an artificial pond with an earth embankment with concrete core walls. Accord Pond provides water to the Hingham/Hull District Water Treatment Facility. The seven basins at Fulling Mill Pump Station are natural depressions from which trees have been cut. These basins feed into underground strata supplying the Fulling Mill Well. This source is then pumped to the Hingham/Hull Distrcit Water Treatment Facility for treatment.

5. Give a full and complete description of the wells

(A) Inside walls 6' from bottom are built of stone laid dry. From that point upwards, the wall is dome shaped made of concrete with suitable opening on top. The water from the well is pumped by the Fulling Mill Station.

(B) Drilled in 1951, well pump installed in 1952. 30' of 24" stainless steel screen, 43' of 24" transite solid casing, gravel packed and concrete sealed. In 1995, replaced, well pump and redeveloped this well. The casing was lined with steel pipe in 1999. Redeveloped in 2005.

(C) Drilled in 1955, well pump installed in 1956. 30' of solid steel casing, 15' of 24" stainless steel screen, gravel packed and concrete sealed. Redeveloped in 1978; casing reduced from 24" to 18" with 15' of 18" stainless steel screen. Redeveloped in 1987 and 1998.

(D) Drilled in 1965, well pump installed in 1966. 55' of 6" of solid steel casing, 10' of 24" stainless steel screen, gravel packed and concrete sealed. Redeveloped in 1988.

(E) Drilled in 1967, well pump installed in 1968. 78' of solid steel casing, 10' of 8" stainless steel screen, gravel packed and concrete sealed. Redeveloped in 1988.

(F) Drilled well in 1971, well pump installed in 1998. 48' of solid steel casing, 10' of 18" stainless steel screen, gravel packed and concrete sealed.

(G) Well drilled in 1981, pump installed in 1982. 66' of 24" solid steel casing, 20' of 24" variable slot stainless steel screen, gravel packed and concrete sealed. Redeveloped in 2003.

(H) Well drilled in 2001 pump installed in July 2001. 80' of 16" steel casing, 15' of 10" stainless steel screen, gravel packed and concrete sealed.

(I) Replacement/satellite well drilled in 2007 pump installed December 2007. 80' of 18" steel casing, 18' of 12" stainless steel screen, gravel packed. Includes a meter vault.

(J) Replacement/satellite well drilled in 2008 pump installed June 2008. 48' of 18" steel casing, 8' of 12" stainless steel screen, gravel packed. Includes a meter vault.

(K) Replacement/satellite well drilled in 2008 pump installed June 2008. 42' of 18" steel casing, 18' of 12" stainless steel screen, gravel packed. Includes a meter vault.

(L) Replacement/satellite well drilled in 2008 pump installed May 2008. 42' of 24" steel casing, 12' of 18" stainless steel screen, gravel packed. Includes a meter vault.

SUPPLY INFORMATION - Continued - Millbury

4. Wells

Location	Inside Dimensions	Depth Below High Water	Covered or Uncovered	When Built	Cost
A. Millbury Avenue	25'	36'20"	Covered	1984	
B. Oak pond Avenue	24"	30'	Covered	1958	$5,225
C. Jacques Well Station #2	24"	70'	Covered	1965	$32,389
D. Jacques Well Station #1	24"	53'	Covered	1966	$11,681
E. Jacques WTF	30' x 66 '		Covered	2005	$1,517,819
F.					

5. Give a full and complete description of the wells

6. Reserviors

Location	Area at Surface When Full	Full Capacity in Gallons	When Built	Cost
A.				
B.				
C.				
D.				
E.				
F.				

7. Describe the reservoirs, stating to what extent they are artificial; to what extent their bottons were cleaned before being put into service; to what extent their slopes and bottoms are paved; what provisions have been made for raising the water level and increasing the capacity; and give the character of construction of any dams.

SUPPLY INFORMATION - Continued - Oxford

4. Wells

Location	Inside Dimensions	Depth Below High Water	Covered or Uncovered	When Built	Cost
A. Oxford, MA	24"	65'	Covered	1950-59	$53,994
B. Oxford, MA	24"	67'	Covered	1950-59	$50,128
C. Oxford, MA	24"	66'	Covered	1961	$20,383
D. Oxford, MA	12"	66'	Covered	2007	$269,981
E.					
F.					

5. Give a full and complete description of the wells

Three 24" diameter gravel packed wells, one with tansite casting and two stainless steel castings.

6. Reservoirs

Location	Area at Surface When Full	Full Capacity in Gallons	When Built	Cost
A.				
B.				
C.				
D.				
E.				
F.				

7. Describe the reservoirs, stating to what extent they are artificial; to what extent their bottons were cleaned before being put into service; to what extent their slopes and bottoms are paved; what provisions have been made for raising the water level and increasing the capacity; and give the character of construction of any dams.

403

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Hingham

1. Give a general description of the method employed for delivering the water to the company, stating whether gravity is utilized or not; whether the company owns a pumping station or not; and giving all other pertinent information.

Respondent owns twelve wells/ pump stations. Water is pumped from Fulling Mill Station, Fulling Mill Well #1, Fulling Mill Well #2, Free St. Well #2, Free St. Well #2A, Free St. Well #3 & #5, Free St. Well #4, Scotland St. Well, Scotland St. #1A, Prospect St.,, and Accord Pond to the Hingham/Hull District Water Treatment Facility for treatment. Water from the Downing St. Well is pumped directly to the distribution system after treatment. An abandoned booster station in Hull, MA was refurbished and placed in service in 1998.

2. BOILER

This schedule not presently used

3. CHIMNEYS

This schedule not presently used

4. PUMPING ENGINES, STEAM- ACTUATED

This schedule not presently used

5. PUMPS, DRIVEN BY CONNECTED POWER

	LOCATION	TYPE	NAME OF BUILDER	WHEN INSTALLED	COST
A	Fulling Mill #1	Hor Cent	Fairbanks-Morse	1996	*
B	Fulling Mill #2	Hor Cent	Fairbanks-Morse	1996	*
C	Free Street Well #2	Vert Turb	Bryon Jackson	1985	*
D	Scotland Street Well	Vert Turb	Goulds	1998	*
E	Downing Street Well	Vert Turb	Bryon Jackson	1966	*
F	Free Street Well #3	Vert Turb	Goulds	1998	*
G	Prospect Street Well	Vert Turb	Goulds	1998	*
H	Free Street Well #4	Submersible	Goulds	2003	*
I	Beacon Road Booster	Hor Cent	Hayes	1998	*
J	Accord #3	Hor Cent	Fairbanks-Morse	1996	*
K	Accord #4	Hor Cent	Fairbanks-Morse	1996	*
L	Accord #5	Hor Cent	Fairbanks-Morse	1996	*
M	Beacon Road, Hull	Hor Cent	Aurora	1998	*
N	Free Street #5	Submersible	Goulds	2001	*
O	Free Street #2A	Submersible	Goulds	2007	*
P	Fulling Mill Well #1	Submersible	Goulds	2008	*
Q	Fulling Mill Well #2	Submersible	Goulds	2008	*
R	Scotland St. Well #1A	Submersible	Goulds	2008	*
S	Baker Hill Booster #1	Hor Cent	Aurora	2006	*
T	Baker Hill Booster #2	Hor Cent	Aurora	2006	*
U	Baker Hill Booster #3	Hor Cent	Aurora	2006	*
V	Baker Hill Booster #4	Hor Cent	Aurora	2006	*
W	Baker Hill Booster #5	Hor Cent	Aurora	2006	*

	NUMBER OF CYLS.	SINGLE OR DOUBLE ACTING	RATED STROKES PER MINUTE	LENGTH OF STROKE**	DIAM. OF PISTONS OR PLUNGERS	HOW DRIVEN	DISPLACEMENT PER 24 HOURS
A		Double Suction	1,180 RPM	5"	N/A	Electric	1,440,000
B		Double Suction	1,180 RPM	5"	N/A	Electric	1,440,000
C		3 stage	1,770 RPM	13" Disc	N/A	Electric	2,880,000
D		1 stage	1,770 RPM	8"	N/A	Electric/Gas	1,440,000
E		7 stage	1,750 RPM	6"	N/A	Electric/Gas	829,440
F		7 stage	1,770 RPM	5"	N/A	Electric/Gas	518,400
G		1 stage	1,770 RPM	6"	N/A	Electric	622,080
H		2 stage	3,600 RPM	8"	N/A	Electric	1,440,000
I		1 stage	3,600 RPM	4"	N/A	Electric	792,000
J		2 stage	1,770 RPM	6"	N/A	Electric	2,016,000
K		2 stage	1,185 RPM	5"	N/A	Electric	1,008,000
L		2 stage	1,185 RPM	6"	N/A	Electric	2,016,000
M		1 stage	1,800 RPM	6"	N/A	Electric	1,008,000
N		1 stage	3,450 RPM	4"	N/A	Electric	414,720
O		3 stage	3,600 RPM	12"	N/A	Electric	2,880,000
P		2 stage	3,600 RPM	12"	N/A	Electric	2,880,000
Q		2 stage	3,600 RPM	12"	N/A	Electric	2,880,000
R		1 stage	3,600 RPM	12"	N/A	Electric	2,880,000
S		1 stage	3,500 RPM	2"	N/A	Electric	86,400
T		1 stage	3,500 RPM	2"	N/A	Electric	86,400
U		1 stage	3,500 RPM	3"	N/A	Electric	216,000
V		1 stage	3,500 RPM	3"	N/A	Electric	216,000
W		1 stage	1,800 RPM	8"	N/A	Electric	1,728,000

* Cost of pump separately unavailable

**Diameter of impeller

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Millbury

1. Give a general description of the method employed for delivering the water to the company, stating whether gravity is utilized or not; whether the company owns a pumping station or not; and giving all other pertinent information.

Water is supplied from four wells all owned by the company. All are approved public drinking water sources according to the Massachusetts DEP.

2. BOILER

This schedule not presently used

3. CHIMNEYS

This schedule not presently used

4. PUMPING ENGINES, STEAM- ACTUATED

This schedule not presently used

5. PUMPS, DRIVEN BY CONNECTED POWER

	LOCATION	TYPE	NAME OF BUILDER	WHEN INSTALLED	COST
A	Millbury Avenue	Turbine	Floway	2003	
B	Millbury Avenue	Turbine	Floway	2003	
C	Millbury Avenue	Turbine	Floway	2003	
D	Millbury Avenue	Turbine	Floway	2003	
E	Oak Pond	Turbine	Goulds	2008	
F	North Main Street Well #2	Turbine	Goulds	2004	
G	North Main Street Well #1	Turbine	Goulds	2004	
H	Sutton Road Booster	Cent	EFI	1993	
I	Millbury Avenue	Turbine	Floway	2003	
J	Millbury Avenue	Turbine	Floway	2003	
K	Brierly Pond	Cent	PENTAIR	2003	
L	Brierly Pond	Cent	PENTAIR	2003	
M	Brierly Pond	Cent	PENTAIR	2003	
N	Brierly Pond	Cent	PENTAIR	2003	
O	Brierly Pond	Cent	PENTAIR	2003	

	NUMBER OF CYLS.	SINGLE OR DOUBLE ACTING	RATED STROKES PER MINUTE	LENGTH OF STROKE	DIAM. OF PISTINS OR PLUNGERS	HOW DRIVEN	DISPLACEMENT PER 24 HOURS
A			1,790 RPM	Turbine		Electric Motor	1,296,000
B			1,790 RPM	Turbine		Electric Motor	1,296,000
C			1,790 RPM	Turbine		Electric Motor	1,296,000
D			1,180 RPM	Turbine		Electric Motor	1,296,000
E			1,760 RPM	Turbine		Electric Motor	864,000
F			1,760 RPM	Turbine		Electric Motor	457,920
G			1,750 RPM	Turbine		Electric Motor	835,200
H			3,450 RPM	Cent		Electric Motor	864,000
I			1,785 RPM	Turbine		Electric Motor	1,584,000
J			1,785 RPM	Turbine		Electric Motor	1,584,000
K			3,500 RPM	Cent		Electric Motor	1,440,000
L			1,750 RPM	Cent		Electric Motor	172,800
M			1,750 RPM	Cent		Electric Motor	172,800
N			3,500 RPM	Cent		Electric Motor	86,400
O			3,500 RPM	Cent		Electric Motor	86,400

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Oxford

1. Give a general description of the method employed for delivering the water to the company, stating whether gravity is utilized or not; whether the company owns a pumping station or not; and giving all other pertinent information.

Water is pumped from company owned pump stations into distribution system containing a standpipe which floats on the system.

2. BOILER

This schedule not presently used

3. CHIMNEYS

This schedule not presently used

4. PUMPING ENGINES, STEAM- ACTUATED

This schedule not presently used

5. PUMPS, DRIVEN BY CONNECTED POWER

	LOCATION	TYPE	NAME OF BUILDER	WHEN INSTALLED	COST
A	North Main Street #1	Turbine	Bryon Jackson	1959	
B	North Main Street #2	Turbine	Deming	1959	
C	Nelson Street #3	Turbine	Goulds	2005	
D	Sutton Ave. Booster	Turbine	G & L Goulds	1999	
E	Sutton Ave. Booster	Turbine	G & L Goulds	1999	
F	North Main Street #1A	Submersible	Goulds	2007	
G					
H					
I					
J					

	NUMBER OF CYLS.	SINGLE OR DOUBLE ACTING	RATED STROKES PER MINUTE	LENGTH OF STROKE	DIAM. OF PISTINS OR PLUNGERS	HOW DRIVEN	DISPLACEMENT PER 24 HOURS
A		Turbine	1,750 RPM			LP. Gen	432,000
B		Turbine	1,750 RPM			LP. Gen	576,000
C		Turbine	1,750 RPM			Kohler L.P. Gen	1,152,000
D		Turbine	3,500 RPM			Electric Motor	72,000
E		Turbine	3,500 RPM			Electric Motor	72,000
F		Submersible	3,500 RPM			Electric Motor	432,000
G							
H							
I							
J							

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

6. Gas Producers

This schedule not presently used

7. Internal combustion engines.

	Location		Name of Builder	When Installed	Type of Drive	Cost
A	Scotland Street		Continental	1956	Gear Dr	*
B	Downing Street		Continental	1966	Gear Dr	*
C	Free Street Well #3		Allis Chalmers	1968 1969	Gear Dr	*

				Dimensions of Cylinders			
	For Gas, Gasoline or Oil	Number of Cyls.	Single or Double Acting	Diameter	Stroke	2 or 4 Stroke Cycle	Rated H.P.
A	L.P. Gas	6	Single	4	4 13/16	4	75
B	Natural Gas	6	Single	3 5/16	4 3/8	4	46 1/2
C	Natural Gas	6	Single	3 7/8	4 1/2	4	64

8. ELECTRIC MOTORS, INCLUDING COST OF WIRING SWITHCES

	Location	Name of Builder	When Installed	Cost
A	Fulling Mill #1	U.S. Electric	1996	*
B	Fulling Mill #2	U.S. Electric	1996	*
C	Free Street Well #2	U.S. Electric	1952	*
D	Scotland Street Well	U.S. Motors	1998	*
E	Downing Street Well	U.S. Electric	1966	*
F	Free Street Well #3	U.S. Electric	1998	*
G	Free Street Well #2	General Electric	1969	*
H	Prospect Street	U.S. Electric	1998	*
I	Free Street Well #4	U.S. Electric	1968	*
J	Accord #3	U.S. Electric	1996	*
K	Accord #4	U.S. Electric	1996	*
L	Accord #5	U.S. Electric	1996	*
M	Beacon Road, Hull	U.S. Motor	1998	*
N	Free Street Well #5	Franklin	2001	*
O	Free Street Well#2A	Centripro	2007	*
P	Fulling Mill Well#1	Centripro	2008	*
Q	Fulling Mill Well #2	Centripro	2008	*
R	Scotland Street #1A	Centripro	2008	*
S	Baker Hill Booster #1	Aurora	2006	*
T	Baker Hill Booster #2	Aurora	2006	*
U	Baker Hill Booster #3	Aurora	2006	*
V	Baker Hill Booster #4	Aurora	2006	*
W	Baker Hill Booster #5	Aurora	2006	

	A.C. or D.C. if A.C. Give Phase	Volts	Type of Drive	Rated H.P.
A	A.C. 3 Phase	460	Direct	15
B	A.C. 3 Phase	460	Direct	15
C	A.C. 3 Phase	480	Direct	100
D	A.C. 3 Phase	220/440	Direct	25
E	A.C. 3 Phase	220/440	Direct	40
F	A.C. 3 Phase	230/460	Direct	60
G	A.C. 3 Phase	460	Direct	25
H	A.C. 3 Phase	230/460	Direct	20
I	A.C. 3 Phase	460	Direct	25
J	A.C. 3 Phase	460	Direct	40
K	A.C. 3 Phase	460	Direct	50
L	A.C. 3 Phase	460	Direct	75
M	A.C. 3 Phase	240	Direct	20
N	A.C. 3 Phase	460	Direct	5
O	A.C. 3 Phase	460	Direct	175
P	A.C. 3 Phase	460	Direct	15
Q	A.C. 3 Phase	460	Direct	15
R	A.C. 3 Phase	460	Direct	20
S	A.C. 3 Phase	480	Direct	5
T	A.C. 3 Phase	480	Direct	5
U	A.C. 3 Phase	480	Direct	8
V	A.C. 3 Phase	480	Direct	8
W	A.C. 3 Phase	480	Direct	50
			Total Horse Power	815

* Cost of motor separately unavailable

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Millbury

6. Gas Producers

This schedule not presently used

7. Internal combustion engines.

	Location	Name of Builder	When Installed	Type of Drive	Cost
A	Jacques Well Station #1	Kohler	2010	Generator	
B	Jacques Well Station #2	Kohler	2006	Generator	
C	Oak Pond Well	Cummings	1988	Generator	
D	Sutton Road Booster	Kohler	1994	Generator	
E	Brierly Pond Booster	Generac	2003	Generator	

	For Gas, Gasoline or Oil	Number of Cyls.	Single or Double Acting	Dimensions of Cylinders		2 or 4 Stroke Cycle	Rated H.P.
				Diameter	Stroke		
A	Fuel Oil	4	Single	4.19	5	4	158
B	Fuel Oil	6	Single	4	4 3/8	4	125
C	L.P. Gas	6	Double	5 1/4	15-24 centimeter	4	175
D	L.P. Gas	4	Single	4	5	4	150
E	Gas	8	Double	5 1/4	5	4	175

8. ELECTRIC MOTORS, INCLUDING COST OF WIRING SWITHCES

	Location	Name of Builder	When Installed	Cost
A	Jacques Well Station #1	U.S. Electric	2005	
B	Jacques Well Station #2	U.S. Electric	2005	
C	Oak Pond	U.S. Electric	2008	
D	Sutton Rd. Booster	EFI	1993	
E	Brierly Pond Booster	U.S. Electric	2003	
F	Brierly Pond Booster	U.S. Electric	2003	
G	Brierly Pond Booster	U.S. Electric	2003	
H	Brierly Pond Booster	U.S. Electric	2003	
I	Brierly Pond Booster	U.S. Electric	2003	

	A.C. or D.C. if A.C. Give Phase	Volts	Type of Drive	Rated H.P.
A	A.C. 3 Phase	230/460	Direct	60
B	A.C. 3 Phase	230/460	Direct	60
C	A.C. 3 Phase	230/460	Direct	100
D	A.C. 3 Phase	230/460	Direct	60
E	A.C. 3 Phase	230/460	Direct	40
F	A.C. 3 Phase	230/460	Direct	10
G	A.C. 3 Phase	230/460	Direct	10
H	A.C. 3 Phase	230/460	Direct	5
I	A.C. 3 Phase	230/460	Direct	5
			Total Horse Power	350

Pumping Information - Continued Oxford

6. Gas Producers

This schedule not presently used

7. Internal combustion engines.

	Location	Name of Builder	When Installed	Type of Drive	Cost
A	#1 North Main Street	Koehler	2012	Generator	
B	#2 North Main Street	Koehler	2012	Generator	
C	#3 Nelson Street	Koehler	2005	Generator	
D	Sutton Ave.	Koehler	2000	Generator	

	For Gas, Gasoline or Oil	Number of Cyls.	Single or Double Acting	Dimensions of Cylinders		2 or 4 Stroke Cycle	Rated H.P.
				Diameter	Stroke		
A	Fuel Oil	4	Double	4.19	5	4	197
B	Diesel	4	Double	4.19	5	4	125
C	L.P. Gas	8	Single	4	4 3/8	4	125
D	L.P. Gas	6	Single	4	3.98	4	82

8. ELECTRIC MOTORS, INCLUDING COST OF WIRING SWITHCES

	Location	Name of Builder	When Installed	Cost
A	#1 North Main Street	U.S. Motors	1990	
B	#2 North Main Street	U.S. Motors	1990	
C	#3 Nelson Street	U.S. Motors	2005	
D	Sutton Ave. Booster	Baldor	1999	
E	#1A North Main Street	Franklin	2007	

	A.C. or D.C. if A.C. Give Phase	Volts	Type of Drive	Rated H.P.
A	A.C. 3 Phase	575	Direct	60
B	A.C. 3 Phase	575	Direct	60
C	A.C. 3 Phase	480	Direct	100
D	A.C. 3 Phase	230/460	Direct	5
E	A.C. 3 Phase	575	Direct	60
			Total Horse Power	285

Pumping Information - Continued. - Hingham

9. Water Wheels and Turbines

	Location	Name of Builder	When Installed	Cost
A.				
B.	NONE			
C.				
D.				

	Type of Machine	Diam. of Runner	Working Head	Speed	Type of Driver	Rated H.P.
A.						
B.						
C.						
D.						

10. Give a full and complete description of any water power rights that are owned by the Company, and say when they were bought and what was paid for them

Pumping Information - Continued. - Millbury

9. Water Wheels and Turbines

	Location	Name of Builder	When Installed	Cost
A.				
B.	NONE			
C.				
D.				

	Type of Machine	Diam. of Runner	Working Head	Speed	Type of Driver	Rated H.P.
A.						
B.						
C.						
D.						

10. Give a full and complete description of any water power rights that are owned by the Company, and say when they were bought and what was paid for them

Pumping Information - Continued. - Oxford

9. Water Wheels and Turbines

	Location	Name of Builder	When Installed	Cost
A.				
B.	NONE			
C.				
D.				

	Type of Machine	Diam. of Runner	Working Head	Speed	Type of Driver	Rated H.P.
A.						
B.						
C.						
D.						

10. Give a full and complete description of any water power rights that are owned by the Company, and say when they were bought and what was paid for them

407 Hingham

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log System Delivery Summary - Hingham/Hull District Water Treatment Facility Only

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	192,150		88.390	744			
February	159,950		77.256	672			
March	159,250		81.941	744			
April	160,300		79.549	720			
May	177,100		107.502	744			
June	179,550		113.143	720			
July	226,100		134.867	744			
August	202,650		130.370	744			
September	188,650		112.393	720			
October	182,700		99.050	744			
November	149,450		79.116	720			
December	172,900		81.592	744			
Totals	2,150,750	0	1,185.169	8,760	0	0	0

12. Based upon the displacement of_____**gallons per revolution with**_____**per cent allowance for slip**____

13. Average gallons per day 3.247 MG (365 days)

14. Maximum gallons pumped in a day 5.261 MG

15. Date of same, 15-Jul-13

16. Range of pressure in main 45-95 psi

17. Average pressure in main 82 psi

408	System Delivery Summary - Hingham/Hull District Water Treatment Facility Only	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.15000	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	2,150,750 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Accord Pond to Water Treatment Facility**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	10,382		26.679	611			
February	7,197		16.592	349			
March	3,645		2.294	233			
April	2,560		4.923	224			
May	4,372		18.681	346			
June	4,479		20.602	336			
July	10,722		38.319	689			
August	8,947		40.641	718			
September	7,910		33.534	694			
October	5,932		25.257	495			
November	2,469		2.434	192			
December	3,292		2.843	120			
Totals	71,907	0	232.799	5,007	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.638 MG (365days)

14. Maximum gallons pumped in a day 1.604 MG

15. Date of same, 5-Aug-13

16. Range of pressure in main 5-10 psi

17. Average pressure in main 10 psi

408	Accord Pond to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.1600	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	71,907 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Fulling Mill Well 1 to Water Treatment Facility**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	24,718		13.135	744			
February	20,035		11.389	672			
March	19,989		12.123	744			
April	19,535		11.456	720			
May	11,407		8.855	528			
June	18,292		13.948	720			
July	20,850		14.477	744			
August	19,936		14.477	744			
September	17,141		14.010	720			
October	14,631		3.269	168			
November	10,617		0.000	0			
December	11,749		0.000	0			
Totals	208,900	0	117.139	6,504	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.321 MG (365 days)

14. Maximum gallons pumped in a day 0.49 MG

15. Date of same, 13-Jun-13

16. Range of pressure in main 35-45 psi

17. Average pressure in main 40 psi

408	Fulling Mill Well 1 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.1500	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	208,900 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Fulling Mill Well 2 to Water Treatment Facility**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January			4.397	744			
February			3.667	672			
March			3.499	744			
April			3.162	720			
May			4.380	432			
June			8.460	720			
July			7.875	744			
August			7.409	744			
September			6.715	720			
October			7.537	744			
November			7.245	720			
December			7.182	744			
Totals	0	0	71.528	8,448	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.196 MG (365 days)

14. Maximum gallons pumped in a day 0.324 MG

15. Date of same, 25-May-13

16. Range of pressure in main 35-45 psi

17. Average pressure in main 40 psi

408	Fulling Mill Well 2 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	see Fulling Mill 1 meter	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	see Fulling Mill 1 meter	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Scotland St to Water Treatment Facility**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	3,903		0.000	0			
February	2,835		0.000	0			
March	2,865		0.000	0			
April	2,352		0.000	0			
May	6,492		0.000	0			
June	5,415		0.000	0			
July	10,646		4.630	310			
August	6,243		0.000	0			
September	5,367		0.000	0			
October	5,051		0.000	0			
November	8,382		0.000	0			
December	9,812		0.000	0			
Totals	69,363	0	4.630	310	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.013 MG (365 days)

14. Maximum gallons pumped in a day 0.402 MG

15. Date of same, 7-Jul-13

16. Range of pressure in main 5-10 psi

17. Average pressure in main 8 psi

408	Scotland St to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		

18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.1600	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	69,363 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Scotland St 1A to Water Treatment Facility**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January			0.574	47			
February			0.435	43			
March			0.583	225			
April			1.627	244			
May			9.824	601			
June			9.963	569			
July			10.408	621			
August			8.488	505			
September			5.877	352			
October			8.336	464			
November			10.649	720			
December			11.107	720			
Totals	0	0	77.871	5,111	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.213 MG (365 days)

14. Maximum gallons pumped in a day 0.544 MG

15. Date of same, 1-Jun-13

16. Range of pressure in main 5-10 psi

17. Average pressure in main 8 psi

408	Scotland St 1A to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		

18. Kind of coal	
19. Average price per net ton, delivered	
20. Average price of wood per cord, delivered	
21. Average price per gas per M. cubic feet	
22. Average price per gasoline per gallon, delivered	
23. Average price of fuel oil per gallon, delivered	
24. Average price of electric power per Kwhr	See Scotland Street Meter
25. Wood consumed durind the year	
26. Gas consumed during the year	
27. Gasoline consumed during the year	
28. Fuel oil consumed during the year	
29. Electric Power used during the year	0 Kwhrs

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Downing Street Well**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	3,029		0.000	0			
February	2,641		0.000	0			
March	2,619		0.000	0			
April	3,533		0.000	0			
May	285		0.000	0			
June	88		0.000	0			
July	70		0.000	0			
August	0		0.000	0			
September	198		0.000	0			
October	104		0.000	0			
November	1,786		0.000	0			
December	2,881		0.000	0			
Totals	17,234	0	0.000	0	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.000 MG (365 days)

14. Maximum gallons pumped in a day 0 MG

15. Date of same,

16. Range of pressure in main 80-95 psi

17. Average pressure in main 82 psi

408	Downing Street Well	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.2000	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	17,234 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Prospect Street to Water Treatment Facility**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	4,551		7.195	611			
February	4,016		4.694	399			
March	3,358		5.696	436			
April	1,263		2.567	215			
May	2,664		6.129	600			
June	2,021		4.151	541			
July	2,670		2.195	393			
August	605		0.693	286			
September	443		0.378	64			
October	539		1.301	177			
November	2,211		4.209	512			
December	3,504		5.073	620			
Totals	27,845		44.281	4,854	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.121 MG (365 days)

14. Maximum gallons pumped in a day 0.322 MG

15. Date of same, 21-Mar-13

16. Range of pressure in main 5-10 psi

17. Average pressure in main 10 psi

408	Prospect Street to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.1700	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	27,845 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Free Street #2 to Water Treatment Facility**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	0		0.000	0			
February	0		0.000	0			
March	0		0.000	0			
April	0		0.000	0			
May	0		0.000	0			
June	0		0.000	0			
July	0		0.000	0			
August	0		0.000	0			
September	0		0.000	0			
October	0		0.000	0			
November	0		0.000	0			
December	0		0.000	0			
Totals	0	0	0.000	0	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.000 MG (365 days)

14. Maximum gallons pumped in a day 0 MG

15. Date of same,

16. Range of pressure in main 50-60 psi

17. Average pressure in main 55 psi

408	Free Street #2 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	N/A	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	0 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Free Street #3 & #5 to Water Treatment Facility**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	52,960		10.678	744			
February	44,120		9.968	672			
March	51,680		10.296	664			
April	58,920		1.175	587			
May	56,520		0.000	456			
June	55,360		11.679	693			
July	60,440		13.427	744			
August	71,320		12.408	718			
September	50,680		13.533	720			
October	58,840		14.292	744			
November	57,320		14.026	688			
December	53,880		4.719	264			
Totals	672,040	0	116.201	7,694	0	0	0

Free St #3,4,5 uses same electric meter

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.318 MG (365 days)

14. Maximum gallons pumped in a day 0.777 MG

15. Date of same, 19-Nov-13

16. Range of pressure in main 50 -60 psi

17. Average pressure in main 55 psi

408	Free Street #3 & #5 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.1400	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	672,040 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Free Street #2A to Water Treatment Facility**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	2,310		0.244	112			
February	5,250		7.899	290			
March	25,200		21.996	622			
April	29,610		26.215	649			
May	29,820		27.488	744			
June	28,560		26.338	720			
July	28,350		24.229	744			
August	39,480		27.783	744			
September	31,500		27.725	720			
October	40,530		30.325	744			
November	39,690		29.161	720			
December	35,910		29.523	744			
Totals	336,210	0	278.926	7,553	0	0	0

12. Based upon the displacement of_____**gallons per revolution with**_____**per cent allowance for slip**____

13. Average gallons per day 0.764 MG (365 days)

14. Maximum gallons pumped in a day 1.079 MG

15. Date of same, 31-Oct-13

16. Range of pressure in main 50-60 psi

17. Average pressure in main 55 psi

408	Free Street #2A to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.2000	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	336,210 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Hingham

11. Station log **Free Street #4 to Water Treatment Facility**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January			23.431	744			
February			21.629	672			
March			24.498	744			
April			21.501	720			
May			24.055	744			
June			23.082	720			
July			27.918	744			
August			22.607	744			
September			19.251	720			
October			20.444	744			
November			20.082	720			
December			22.046	744			
Totals	0	0	270.544	8,760	0	0	0

Note: uses meter at Free St # 3

12. Based upon the displacement of_____**gallons per revolution with**_____**per cent allowance for slip**____

13. Average gallons per day 0.741 MG (365 days)

14. Maximum gallons pumped in a day 1.991 MG

15. Date of same, 19-Jul-13

16. Range of pressure in main 50 -60 psi

17. Average pressure in main 55 psi

408	Free Street #4 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Hingham		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	See Free St.#3&5	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year		Kwhrs

407

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Millbury

11. Station Log **Total System**

Year and Month 2013	Kwhrs Used	Purchased Water (MG)	Million Gallons of Water Pumped	Hours of Pumping	Total System (MG) Includes Purchased Wtr	Average Total Static Head	Average Total Dynamic Head
January	81,150	0.000	45.934	1,668	45.934		
February	89,930	0.000	41.127	1,496	41.127		
March	93,750	0.000	48.651	1,732	48.651		
April	87,700	0.000	46.461	1,655	46.461		
May	91,840	0.000	49.705	1,759	49.705		
June	91,950	0.000	48.824	1,688	48.824		
July	85,600	0.000	56.683	1,871	56.683		
August	105,890	0.000	52.464	1,800	52.464		
September	86,300	0.000	48.958	1,729	48.958		
October	95,410	3.600	42.657	1,564	46.257		
November	85,820	13.056	29.463	1,133	42.519		
December	63,060	1.741	41.908	1,611	43.649		
Totals	1,058,400	18.397	552.835	19,706	571.232	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 1.565 MG (365 days)

14. Maximum gallons pumped in a day 2.456 MG

15. Date of same, 21-Jul-13

16. Range of pressure in main 21 lbs to 125 lbs

17. Average pressure in main 73 lbs per sq in

Pumping Information - Continued Millbury

18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$	0.1261
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	1,058,400	Kwhrs

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Millbury

11. Station Log **Millbury Ave. Station**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	11,500		6.979	171			
February	14,500		6.573	164			
March	16,600		9.609	235			
April	21,000		8.775	211			
May	20,000		11.600	285			
June	20,200		10.115	250			
July	22,900		15.769	381			
August	32,100		12.190	302			
September	19,000		11.177	276			
October	31,100		8.073	200			
November	22,500		0.651	16			
December	3,900		8.635	243			
Totals	235,300	0	110.146	2,734	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.302 MG (365 days)

14. Maximum gallons pumped in a day 0.83 MG

15. Date of same, 13-Jul-13

16. Range of pressure in main 21 lbs to 125 lbs

17. Average pressure in main 73 lbs per sq in

408	Millbury Ave. Station	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Millbury		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.1502	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	235,300 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Millbury

11. Station Log **Oak Pond Station**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	22,400		15.584	745			
February	27,680		13.677	654			
March	28,800		15.471	743			
April	24,800		15.094	721			
May	26,240		15.494	743			
June	25,600		16.387	717			
July	23,200		17.907	745			
August	27,840		17.554	748			
September	25,600		15.753	724			
October	24,160		11.631	603			
November	22,720		7.476	415			
December	15,360		11.032	616			
Totals	294,400	0	173.060	8,174	0	0	0

12. Based upon the displacement of_____**gallons per revolution with**_____**per cent allowance for slip**____

13. Average gallons per day 0.474 MG (365 days)

14. Maximum gallons pumped in a day 0.689 MG

15. Date of same, 24-Jul-13

16. Range of pressure in main 21 lbs to 125 lbs

17. Average pressure in main 73 lbs per sq in

408	Oak Pond Station	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2013
Pumping Information - Continued Millbury		
18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.1168	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	294,400 Kwhrs	

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Millbury

11. Station Log **Jacques #1 N. Main St. Station**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	43,650		23.371	752			
February	43,850		20.877	678			
March	44,700		23.571	754			
April	39,250		22.592	723			
May	43,250		22.611	731			
June	44,050		22.322	721			
July	38,300		23.007	745			
August	44,750		22.720	750			
September	40,550		22.028	729			
October	39,050		22.953	761			
November	39,250		21.336	702			
December	42,250		22.241	752			
Totals	502,900	0	269.629	8,798	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.739 MG (365 days)

14. Maximum gallons pumped in a day 0.95 MG

15. Date of same, 21-Jul-13

16. Range of pressure in main 21 lbs to 125 lbs

17. Average pressure in main 73 lbs per sq in

18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.1192	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	502,900	Kwhrs

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Millbury

11. Station Log **Jacques #2 N. Main St. Station**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	3,600		0.000	0			
February	3,900		0.000	0			
March	3,650		0.000	0			
April	2,650		0.000	0			
May	2,350		0.000	0			
June	2,100		0.000	0			
July	1,200		0.000	0			
August	1,200		0.000	0			
September	1,150		0.000	0			
October	1,100		0.000	0			
November	1,350		0.000	0			
December	1,550		0.000	0			
Totals	25,800	0	0.000	0	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.000 MG (365 days)

14. Maximum gallons pumped in a day 0 MG

15. Date of same, n/a

16. Range of pressure in main 21 lbs to 125 lbs

17. Average pressure in main 73 lbs per sq in

Pumping Information - Continued Millbury

18. Kind of coal	
19. Average price per net ton, delivered	
20. Average price of wood per cord, delivered	
21. Average price per gas per M. cubic feet	
22. Average price per gasoline per gallon, delivered	
23. Average price of fuel oil per gallon, delivered	
24. Average price of electric power per Kwhr	$ 0.1474
25. Wood consumed durind the year	
26. Gas consumed during the year	
27. Gasoline consumed during the year	
28. Fuel oil consumed during the year	
29. Electric Power used during the year	25,800 Kwhrs

Annual report of Aquarion Water Company of Massachusetts — Year ended December 31, 2013

Pumping Information - Continued Oxford

11. Station Log — Total System

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	40,720		17.926	1,000			
February	43,760		16.785	945			
March	40,960		18.106	1,007			
April	41,400		19.230	1,097			
May	42,360		23.685	1,296			
June	48,680		22.666	1,303			
July	48,360		25.504	1,480			
August	52,920		24.069	1,299			
September	49,360		21.610	1,185			
October	50,800		18.482	1,035			
November	42,920		16.782	1,006			
December	37,520		16.404	935			
Totals	539,760	0	241.249	13,588	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.661 MG (365 days)

14. Maximum gallons pumped in a day 1.106 MG

15. Date of same, 1-Jun-13

16. Range of pressure in main 48 lbs to 112 lbs

17. Average pressure in main 80 lbs per sq in

Pumping Information - Continued Oxford

18.	Kind of coal	
19.	Average price per net ton, delivered	
20.	Average price of wood per cord, delivered	
21.	Average price per gas per M. cubic feet	
22.	Average price per gasoline per gallon, delivered	
23.	Average price of fuel oil per gallon, delivered	
24.	Average price of electric power per Kwhr	$ 0.1274
25.	Wood consumed durind the year	
26.	Gas consumed during the year	
27.	Gasoline consumed during the year	
28.	Fuel oil consumed during the year	
29.	Electric Power used during the year	539,760 Kwhrs

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Oxford

11. Station Log **North Main St. Well #1**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	11,600		0.000	0			
February	14,000		0.000	0			
March	14,400		0.000	0			
April	15,000		0.047	8			
May	15,800		0.039	2			
June	20,200		0.000	0			
July	21,800		0.000	0			
August	24,600		0.000	0			
September	22,800		0.000	0			
October	24,400		0.000	0			
November	15,400		0.000	0			
December	11,600		0.000	0			
Totals	211,600	0	0.086	10	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.000 MG (365 days)

14. Maximum gallons pumped in a day 0.047 MG

15. Date of same, 22-Apr-13

16. Range of pressure in main 48 lbs to 112 lbs

17. Average pressure in main 80 lbs per sq in

408	North Main St. Well #1	
Annual report of Aquarion Water Company of Massachusetts		Year Ended December 31, 2013
Pumping Information - Continued Oxford		

18. Kind of coal				
19. Average price per net ton, delivered				
20. Average price of wood per cord, delivered				
21. Average price per gas per M. cubic feet				
22. Average price per gasoline per gallon, delivered				
23. Average price of fuel oil per gallon, delivered				
24. Average price of electric power per Kwhr	$	0.1381		
25. Wood consumed durind the year				
26. Gas consumed during the year				
27. Gasoline consumed during the year				
28. Fuel oil consumed during the year				
29. Electric Power used during the year	211,600	Stations 1, 1A & 2	Kwhrs	

407

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Oxford

11. Station Log **North Main St. Well #1A**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	0		0.106	12			
February	0		0.279	30			
March	0		0.094	10			
April	0		0.674	67			
May	0		0.330	37			
June	0		1.828	187			
July	0		2.088	215			
August	0		0.036	4			
September	0		0.179	19			
October	0		0.164	19			
November	0		1.147	116			
December	0		0.017	2			
Totals	(See station # 1 for totals)		6.942	718	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.019 MG (365 days)

14. Maximum gallons pumped in a day 0.274 MG

15. Date of same, 23-Jul-13

16. Range of pressure in main 48 lbs to 112 lbs

17. Average pressure in main 80 lbs per sq in

408	North Main St. Well #1A	
Annual report of Aquarion Water Company of Massachusetts		Year Ended December 31, 2013
Pumping Information - Continued Oxford		

18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr		see station #1
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	see station #1	Kwhrs

407

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

Pumping Information - Continued Oxford

11. Station Log **North Main St. Well #2**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Average Total Static Head	Average Total Dynamic Head
January	0		4.878	235			
February	0		4.772	235			
March	0		5.120	252			
April	0		6.093	306			
May	0		10.253	509			
June	0		7.933	392			
July	0		10.072	511			
August	0		10.971	545			
September	0		8.742	442			
October	0		5.251	267			
November	0		3.271	170			
December	0		3.571	182			
Totals	(See station # 1 for totals)		80.927	4,046	0	0	0

12. Based upon the displacement of_____**gallons per revolution with**_____**per cent allowance for slip**____

13. Average gallons per day 0.222 MG (365 days)

14. Maximum gallons pumped in a day 0.53 MG

15. Date of same, 25-Aug-13

16. Range of pressure in main 48 lbs to 112 lbs

17. Average pressure in main 80 lbs per sq in

* One electric meter is used for 1, 1A & 2

Pumping Information - Continued Oxford

18. Kind of coal	
19. Average price per net ton, delivered	
20. Average price of wood per cord, delivered	
21. Average price per gas per M. cubic feet	
22. Average price per gasoline per gallon, delivered	
23. Average price of fuel oil per gallon, delivered	
24. Average price of electric power per Kwhr	see station #1
25. Wood consumed durind the year	
26. Gas consumed during the year	
27. Gasoline consumed during the year	
28. Fuel oil consumed during the year	
29. Electric Power used during the year	see station #1 Kwhrs

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

11. Station Log **Nelson St. #3**

Year and Month 2013	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping		Total Static Head	Average Total Dynamic Head
January	29,120		12.942	753			
February	29,760		11.734	680			
March	26,560		12.892	745			
April	26,400		12.416	716			
May	26,560		13.063	748			
June	28,480		12.905	724			
July	26,560		13.344	754			
August	28,320		13.062	750			
September	26,560		12.689	724			
October	26,400		13.067	749			
November	27,520		12.364	720			
December	25,920		12.816	751			
Totals	328,160	0	153.294	8,814	0	0	0

12. Based upon the displacement of_____gallons per revolution with_____per cent allowance for slip____

13. Average gallons per day 0.420 MG (365 days)

14. Maximum gallons pumped in a day 0.544 MG

15. Date of same, 18-Feb-13

16. Range of pressure in main 48 lbs to 112 lbs

17. Average pressure in main 80 lbs per sq in

18. Kind of coal		
19. Average price per net ton, delivered		
20. Average price of wood per cord, delivered		
21. Average price per gas per M. cubic feet		
22. Average price per gasoline per gallon, delivered		
23. Average price of fuel oil per gallon, delivered		
24. Average price of electric power per Kwhr	$ 0.1203	
25. Wood consumed durind the year		
26. Gas consumed during the year		
27. Gasoline consumed during the year		
28. Fuel oil consumed during the year		
29. Electric Power used during the year	328,160	Kwhrs

409 Hingham

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

DISTRIBUTION INFORMATION

1. Mains

Nominal Diameter, Inches	Kind of Pipe	Weight Per Foot	LENGTHS IN FEET: In Use at Beginning of Year	Taken Up Since	Abandoned But Not Taken Up	Laid Since	In Use at Close of Year
24"	Ductile		10,285				10,285
20"	Lock Joint		13,909				13,909
20"	Cast Iron		26,935				26,935
20"	Cast Iron Cement Lined		277				277
20"	Ductile		10,271				10,271
16"	Lock Joint		112				112
16"	Cast Iron		5,531				5,531
16"	Cast Iron Cement Lined		104				104
16"	Ductile		3,767				3,767
14"	Cast Iron		5,936				5,936
14"	Ductile		110				110
12"	Cast Iron		51,372				51,372
12"	Cast Iron Cement Lined		29,648				29,648
12"	Ductile		46,734				46,734
12"	Transite		12,602				12,602
10"	Cast Iron		11,459				11,459
8"	Cast Iron		40,531	12			40,519
8"	Cast Iron Cement Lined		114,469				114,469
8"	Ductile		174,155				174,155
8"	Transite		45,381	26	710	758	45,403
8"	Steel		70				70
6"	Cast Iron		117,279				117,279
6"	Cast Iron Cement Lined		74,764				74,764
6"	Ductile		12,074			731	12,805
6"	Transite		89,967				89,967
4"	Cast Iron		31,508				31,508
4"	Cast Iron Cement Lined		77				77
4"	Ductile		12,247				12,247
4"	Galvanized		256				256
4"	Plastic		500				500
3"	Cast Iron		1,323				1,323
3"	Galvanized		82				82
3"	Plastic		525				525
2 1/4"	Cast Iron Cement Lined		38,213		618		37,595
2"	Steel		400				400
2"	Galvanized		20,593	10			20,583
2"	Plastic		1,272			10	1,282
1 1/2 "	Galvanized		2,449				2,449
1 1/4"	Galvanized		802				802
1"	Plastic		0				0
1"	Copper		339				339
1"	Galvanized		3,831				3,831
3/4"	Galvanized		100				100
3/4"	Copper		49				49
		TOTALS	1,012,308	48	1,328	1,499	1,012,431

2. Cost of repairs per mile of pipe including valves _____

3. Number of leaks in mains, during the year 30

4. Number of leaks per mile 0.1565

5. Length of mains less than 4 inches in diamater 69,360 miles 13.14

409 Milbury

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

DISTRIBUTION INFORMATION

1. Mains

Nominal Diameter, Inches	Kind of Pipe	Weight Per Foot	LENGTHS IN FEET: In Use at Beginning of Year	Taken Up Since	Abandoned But Not Taken Up	Laid Since	In Use at Close of Year
16	Cast Iron		6,575				6,575
12	C. I. & Ductile		39,123				39,123
10	Cast Iron		17,691				17,691
8	C.I. & Ductile		119,394		536	536	119,394
6	C.I. & Ductile		66,760		31	31	66,760
4	Cast Iron		1,323				1,323
3	Cast Iron		935				935
2 1/4	Cast Iron		12,751				12,751
2	Cast Iron		3,605				3,605
8	Transite		1,497				1,497
6	Transite		3,609				3,609
2	Plastic		835				835
		TOTALS	274,098	0	567	567	274,098

2. Cost of repairs per mile of pipe including valves _____

3. Number of leaks in mains, during the year 11

4. Number of leaks per mile 0.2119

5. Length of mains less than 4 inches in diamater 18,126 miles 3.43

409 Oxford

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

DISTRIBUTION INFORMATION

1. Mains

Nominal Diameter, Inches	Kind of Pipe	Weight Per Foot	LENGTHS IN FEET: In Use at Beginning of Year	Taken Up Since	Abandoned But Not Taken Up	Laid Since	In Use at Close of Year
12	C.I. & Ductile		29,090				29,090
10	C.I. & Ductile		1,643				1,643
8	C.I. & Ductile		84,075				84,075
6	C.I. & Ductile		55,453			20	55,473
3	C.I. & Ductile		200				200
2 1/4	C.I. & Ductile		3,665				3,665
2	C.I. & Ductile		11,413				11,413
8	Transite		6,267	8			6,259
6	Transite		22,506				22,506
4	Ductile		354				354
2	Plastic		31				31
		TOTALS	214,697	8	0	20	214,709

2. Cost of repairs per mile of pipe including valves _____

3. Number of leaks in mains, during the year 3

4. Number of leaks per mile 0.0738

5. Length of mains less than 4 inches in diamater 15,309 miles 2.90

DISTRIBUTION INFORMATION

6. Water towers or stand pipes

	Location	Land		
		Area	When Bought	Cost
A	Turkey Hill	23	1963	$4,766
B	Accord Tank			
C	(Accord Tank on land adjacent to Accord Pond - included there			

	Capacity in Gallons	When Bought	Cost
A	2,000,000	1963	$103,921
B	750,000	1967	$145,359
C			
	2,750,000		

7. Services

Nominal Diameter Inches	Kind of Pipe	Number Installed and in Use at Beginning of Year	Taken Up Since	Laid Since	Installed and in Use at Close of Year
3/4" - 10"	Copper-WI-Steel	0			0
	Plastic Galv	10,353	23		10,330
Installed since 1987		0			0
		0			0
3/4"	Plastic	0			0
3/4"	Copper	259		10	269
1"	Plastic	1,013			1,013
1"	Copper	752		49	801
2"	Plastic	227		6	233
4"	DICL	128	19	8	117
6"	DICL	77		33	110
8"	DICL	44		32	76
12"	DICL	1		1	2
	TOTALS	12,854	42	139	12,951

8. Average length of service pipe 25 feet

9. Average cost of service laid during the year $ 3,256

10. Percentage of services that are metered All except for fire services

11. Percentage in income that is metered

12. Leaks in service during the year 21

13. Are service pipes paid for by consumer, in whole or in part and by what extent? Water company provides labor materials for installation up to 2 inch in size, customer provides all other requirements to install water service including materials over 2 inch in size.

DISTRIBUTION INFORMATION

6. Water towers or stand pipes Millbury

	Location	Land		
		Area	When Bought	Cost
A	Burbank Hill	3.00 Acres	1895	
B				
C				
D				

	Inside Diameter	Capacity in Gallons	When Bought	Cost
A	130'	1,500,000	1895	$25,802
B				
C				
D				

7. Services

Nominal Diameter Inches	Kind of Pipe	Number Installed and in Use at Beginning of Year	Taken Up Since	Laid Since	Installed and in Use at Close of Year
12	Cast Iron Ductile	0		1	1
10	Cast Iron	1		1	2
8	Cast Iron Ductile	16		6	22
6	Cast Iron Ductile	38		35	73
4	Cast Iron Ductile	5		49	54
3	Cast Iron	2	1		1
2 1/4	Cast Iron	7			7
2	Cast Iron	25			25
1 1/4	Cast Iron	4	4		0
1 1/2	Copper	0			0
3/4	Copper	1,365	11	129	1,483
3/4	Plastic	612	3		609
1	Copper	380		16	396
1	Plastic	504			504
1	Cement Lined	489			489
2	Plastic	33	4		29
2	Copper	2			2
	TOTALS	3,483	23	237	3,697

Also 11 residential services in the Town of Auburn that are included in the above totals

8. Average length of service pipe 27 feet

9. Average cost of service laid during the year $ 5,061

10. Percentage of services that are metered all except fire service

11. Percentage in income that is metered

12. Leaks in service during the year 4

13. Are service pipes paid for by consumer, in whole or in part and by what extent? Water company provides labor materials for installation up to 2 inch in size, customer provides all other requirements to install water service including materials over 2 inch in size.

DISTRIBUTION INFORMATION

6. Water towers or stand pipes

	Location	Land		
		Area	When Bought	Cost
A	N. Main St., Oxford , MA	1 Acre	1905	$319
B		13.4 Acres	1944	$438
C				
D				

	Inside Diameter	Capacity in Gallons	When Bought	
A	27	215,000	1905	
B				
C				
D				

7. Services

Nominal Diameter Inches	Kind of Pipe	Number Installed and in Use at Beginning of Year	Taken Up Since	Laid Since	Installed and in Use at Close of Year
12	Cast Iron Ductile	0	0	1	1
8	Cast Iron Ductile	8	4		4
6	Cast Iron Ductile	12		16	28
2 1/4	Cast Iron	12			12
2	Galv Iron	0			0
1 1/2	Copper	2	2		0
1 1/4	Copper	1	1		0
1	Copper	226		10	236
3/4	Copper	1,502	4		1,498
2	Cast Iron	5			5
4	Cast Iron Ductile	2		4	6
3/4	Plastic	495	246		249
1	Plastic	553	3	2	552
2	Plastic	27			27
1	Galv Iron	18			18
	TOTALS	2,863	260	33	2,636

8. Average length of service pipe: 27 feet

9. Average cost of service laid during the year: $ 2,183

10. Percentage of services that are metered: all except fire service

11. Percentage in income that is metered:

12. Leaks in service during the year: 9

13. Are service pipes paid for by consumer, in whole or in part and by what extent? Water company provides labor materials for installation up to 2 inch in size, customer provides all other requirements to install water service including materials over 2 inch in size.

DISTRIBUTION INFORMATION - Continued

14. Gates and valves

Nomial Diameter Inches	Kind of Valves	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
24	Butterfly Valves	17			17
20	Butterfly Valves	18			18
16	Butterfly Valves	8			8
14	Butterfly Valves	5			5
12	Butterfly Valves	19			19
12	Check Valve	1			1
20	Gate Valves	11			11
16	Gate Valves	11			11
14	Gate Valves	16			16
12	Gate Valves	306			306
10	Gate Valves	32			32
8	Gate Valves	917		3	920
6	Gate Valves	815	1	1	815
4	Gate Valves	209			209
3	Gate Valves	1			1
2 1/4 - 2 1/2	Gate Valves	86			86
2	Gate Valves	200	1	1	200
1 1/2	Gate Valves	9			9
1 1/4	Gate Valves	17			17
1	Gate Valves	271			271
3/4	Gate Valves	81			81
	Totals	3,050	2	5	3,053

The above list should include all valves that are installed in the mains, whether they are gate valves, blow offs, check valves or otherwise.

DISTRIBUTION INFORMATION - Continued

14. Gates and valves

Nomial Diameter Inches	Kind of Valves	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
16	Gate Valve	7			7
12	Gate Valve	71			71
10	Gate Valve	25			25
8	Gate Valve	243		4	247
6	Gate Valve	345	3	1	343
4	Gate Valve	3			3
3	Gate Valve	6			6
2 1/4	Gate Valve	31			31
2	Gate Valve	25			25
3/4	Gate Valve	2			2
	Totals	758	3	5	760

The above list should include all valves that are installed in the mains, whether they are gate valves, blow offs, check valves or otherwise.

DISTRIBUTION INFORMATION - Continued

14. Gates and valves

Nomial Diameter Inches	Kind of Valves	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
12	Gate Valve	57			57
10	Gate Valve	2			2
8	Gate Valve	184			184
6	Gate Valve	294		1	295
2 1/2	Gate Valve	18			18
2	Gate Valve	11			11
1 1/4	Gate Valve	2			2
1	Gate Valve	8			8
4	Gate Valve	1			1
	Totals	577	0	1	578

The above list should include all valves that are installed in the mains, whether they are gate valves, blow offs, check valves or otherwise.

DISTRIBUTION INFORMATION - Continued

15. HYDRANTS.PUBLIC

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
4 1/2		0			0
4 1/4		0			0
5		491			491
5 1/4		413	3	1	411
	TOTALS	904	3	1	902

16. Were all of the above hydrants purchases and installed at the expense of the company? NO

17. If not, under what arrangement were they purchases and installed? Customer/Town Purchased & Installed
Town Owned

18. HYDRANTS.PRIVATE

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
5		3			3
4 1/2		0			0
4 1/4		6			6
5		34			34
5 1/4		241		5	246
Metered		122			122
	TOTALS	406	0	5	411

19. Were all of the above hydrants purchases and installed at the expense of the company? NO

20. If not, under what arrangement were they purchases and installed? Customer/Town Purchased & Installed

DISTRIBUTION INFORMATION - Continued

15. HYDRANTS.PUBLIC

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
4 1/2	2 - 2 1/2	28			28
5	2 - 2 1/2, 1- 4	1			1
5 1/4	2 - 2 1/2, 1- 4	53	1	3	55
4 1/4	2 - 2 1/2, 1- 4	65			65
4 1/2	2 - 2 1/2, 1- 4	61			61
4 3/4	2 - 2 1/2, 1- 4	8			8
4 1/4	2 - 2 1/2, 1- 4	1	Hydrant is located in town of Auburn		1
	TOTALS	217	1	3	219

16. Were all of the above hydrants purchases and installed at the expense of the company? NO

17. If not, under what arrangement were they purchases and installed? Hydrants installed on new main extensions are paid by developers.

18. HYDRANTS.PRIVATE

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
4	2 - 2 1/2	28			28
4 1/2	2 - 2 1/2, 1- 4	13			13
4 1/4	2 - 2 1/2, 1- 4	5			5
5 1/4	2 - 2 1/2, 1- 4	56	2		54
	TOTALS	102	2	0	100

19. Were all of the above hydrants purchases and installed at the expense of the company? NO

20. If not, under what arrangement were they purchases and installed? Customer Purchased

DISTRIBUTION INFORMATION - Continued

15. HYDRANTS.PUBLIC

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
4	2 - 2 1/2	29			29
4	3 - 2 1/2	0			0
4 1/4	2 - 2 1/2, 1- 4	3			3
4 1/2	2 - 2 1/2, 1- 4	76	2		74
5	2 - 2 1/2, 1- 4	5			5
4	2 - 2 1/2, 1- 4	1			1
5 1/4	2 - 2 1/2, 1- 4	69		2	71
	TOTALS	183	2	2	183

16. Were all of the above hydrants purchases and installed at the expense of the company? NO

17. If not, under what arrangement were they purchases and installed? Hydrants installed on new main extensions are paid for by developers.

18. HYDRANTS.PRIVATE

Nominal Diameter Inches	Hose Outlets	Number in Use at Beginning of Year	Removed Since	Installed Since	Number in Use at Close of Year
4	2 - 2 1/2, 1- 4	13			13
5 1/4	2 - 2 1/2, 1- 4	0			0
	TOTALS	13	0	0	13

19. Were all of the above hydrants purchases and installed at the expense of the company? NO

20. If not, under what arrangement were they purchases and installed? Customer Purchased

413 Hingham

Annual report of Aquarion Water Company of Massachusetts **Year ended December 31, 2013**

DISTRIBUTION INFORMATION - Continued

21. Meters owned by Company

Size inches	Number at Beginning of Year		Bought Since	Condemned Since and Removed	Number at Close of Year	
	In Use	On Hand			In Use	On Hand
1/2						
5/8	11,790	91	1,200	943	11,880	258
3/4	19	49	0	2	17	49
1	361	15	21	20	362	15
1 1/2	76	0	15	8	78	5
2	154	20	16	17	155	18
3	0	2	0		0	2
4	3	0	0		3	0
6	3	0	0	0	3	0
8	4	0	0	0	4	0
Totals	12,410	177	1,252	990	12,502	347

22. Has the plant been debited with the first cost of installing the meters in use at close of year, above s: Yes

23. If so, was the cost the actual cost or some assumed or average cost? Actual

24. Are any of these meters paid for by consumers, and to what extent? None

DISTRIBUTION INFORMATION - Continued

21. Meters owned by Company

Size inches	Number at Beginning of Year In Use	Number at Beginning of Year On Hand	Bought Since	Condemned Since and Removed	Number at Close of Year In Use	Number at Close of Year On Hand
1/2						
5/8	3,406	91	417	411	3,424	79
3/4	1	0	0	0	1	0
1	55	2	20	16	56	5
1 1/2	17	5	6	1	17	10
2	46	9	12	10	46	11
3	1	0	0	0	1	0
4	4	0	0	0	4	0
5						
8						
Totals	3,530	107	455	438	3,549	105

22. Has the plant been debited with the first cost of installing the meters in use at close of year, above stated? Yes

23. If so, was the cost the actual cost or some assumed or average cost? Actual

24. Are any of these meters paid for by consumers, and to what extent? None

Company owned meters at pump stations:

Oak Pond Station 1-8" Honeywell Flow
#1 Jacques 1-8" Chessel Flow
#2 Jacques 1-8" Chessel Flow
5-1" mtrs for make up water - 1-Oak Pond, 1-#1 Jacques, 1-#2 Jacques, 2-Millbury Ave. Filter Plant
Millbury Ave. - 5-6" Primary Flow Signal Flow Meters
Millbury Ave. - 3-8" Primary Flow Signal Flow Meters

DISTRIBUTION INFORMATION - Continued

21. Meters owned by Company

Size inches	Number at Beginning of Year In Use	Number at Beginning of Year On Hand	Bought Since	Condemned Since and Removed	Number at Close of Year In Use	Number at Close of Year On Hand
1/2						
5/8	2,510	25	231	225	2,515	25
3/4	0	0	0	0	0	0
1	54	0	5	2	57	0
1 1/2	8	0	1	0	9	0
2	16	0	0	0	16	0
3	0	0	0	0	0	0
4	0	0	0	0	0	0
6	3	0	0	0	3	0
8	0	0	0	0	0	0
Totals	2,591	25	237	227	2,600	25

22. Has the plant been debited with the first cost of installing the meters in use at close of year, above stated? Yes

23. If so, was the cost the actual cost or some assumed or average cost? Actual

24. Are any of these meters paid for by consumers, and to what extent? None

Company owned m N Main St. & #1A N. Main St.
N. Main St. #1 1-8" Chessel flow
N. Main St. #2 1-8" Chessel flow
Nelson St. #3 1-8" Chessel flow
2-1" Meter for make up water
#1N. Main St.
#3 Nelson St.

414 **Hingham**

Annual report of Aquarion Water Company of Massachusetts

Distribution Information - Concluded

25. Meters owned by Company as of December 31, 2013

		Size (inches)										
Maker	**Type**	**1/2**	**5/8**	**3/4**	**1**	**1 1/2**	**2**	**3**	**4**	**6**	**8**	**Total**
Hersey	Turbine									2		2
Neptune	Disc Pin		12,138	66	377	83	173					12,837
Neptune	Turbine							2	3	1	4	10
Totals		0	12,138	66	377	83	173	2	3	3	4	12,849

414 Millbury

Annual report of Aquarion Water Company of Massachusetts

Distribution Information - Concluded

25. Meters owned by Company as of December 31, 2013

		Size										
Maker	Type	1/2	5/8	3/4	1	1 1/2	2	3	4	6	8	Total
Neptune	Disc		3,436	1	61	27	57	1				3,583
Badger	Disc		55		0	0						55
Neptune	Turbine								4			4
Kent	Disc		12									12
Rockwell	Disc											
Totals		0	3,503	1	61	27	57	1	4	0	0	3,654

414 Oxford

Annual report of Aquarion Water Company of Massachusetts

Distribution Information - Concluded

25. Meters owned by Company as of December 31, 2013

		Size										
Maker	Type	1/2	5/8	3/4	1	1 1/2	2	3	4	6	8	Total
Neptune	Disc		2,520	0	54	8	14					2,596
Badger	Disc		15		3		2					20
Neptune	Fullcrest									2		2
Rockwell	Disc					1						1
Kent	Disc		5									5
Neptune	Protectus									1		1
Totals		0	2,540	0	57	9	16	0	0	3	0	2,625

415 Hingham

Annual report of Aquarion Water Company of Massachusetts American Water Company Year ended December 31, 2013

CONSUMPTION INFORMATION

	Permanent	Seasonal
1. Estimated total population of territory covered by franchise	32,396	46,982
2. Estimated population reached by the distribution system,	32,396	46,982
3. Estimated population actually supplied,	32,396	46,982

4. Total consumption during the year (1)	1,220,596,275	gallons
5. Average daily consumption (2)	3,344,099	gallons
6. Day on which greatest amount was pumped	15-Jul-13	
7. Gallons pumped on above day	5,261,000	gallons
8. Week during which greatest amount was pumped	7/19/12-7/25/13	
9. Gallons pumped during above week	32,525,000	gallons
10. Gallons per day per service (3)	202	gallons
11. Consumption metered	921,568,000	gallons
12. Consumption metered	75.5%	Per cent of total consumption

13. Customers

Number being Supplied at Beginning of Year	Disconnected Since	Connected Since	Number being Supplied at Close of Year
12,848	0	106	12,954

Name of City, Town or District	Number of Customers as of December 31, 2013
Hingham	8,033
Hull	4,594
Cohasset	327

(1) Represents Total Water Production During the Year including purchased water
(2) Represents Average Daily Production
(3) Represents Metered Consumption per day per Customer, excluding Fire services.

415 Millbury

Annual report of Massachusetts American Water Company **Year ended December 31, 2013**

CONSUMPTION INFORMATION

1. Estimated total population of territory covered by franchise,	13,261	
2. Estimated population reached by the distribution system,	8,505	
3. Estimated population actually supplied,	8,505	
4. Total consumption during the year (1)	571,232,000	gallons
5. Average daily consumption (2)	1,565,019	gallons
6. Day on which greatest amount was pumped	21-Jul-13	
7. Gallons pumped on above day	2,456,000	gallons
8. Week during which greatest amount was pumped	w/e: July 21, 2013	
9. Gallons pumped during above week	14,087,000	gallons
10. Gallons per day per service (3)	392	gallons
11. Consumption metered	508,054,000	gallons
12. Consumption metered	88.94%	Per cent of total consumption

13. Customers

Number being Supplied at Beginning of Year	Disconnected Since	Connected Since	Number being Supplied at Close of Year
3,668		30	3,698

Name of City, Town or District	Number of Customers as of December 31, 2013
Millbury	3,698

(1) Represents Total Water Production During the Year
(2) Represents Average Daily Production
(3) Represents Metered Consumption per day per Customer, excluding Fire Services.

415 Oxford

Annual report of Massachusetts American Water Company **Year ended December 31, 2013**

CONSUMPTION INFORMATION

1. Estimated total population of territory covered by franchise,	12,506	
2. Estimated population reached by the distribution system,	6,223	
3. Estimated population actually supplied,	6,223	
4. Total consumption during the year (1)	241,249,000	gallons
5. Average daily consumption (2)	660,956	gallons
6. Day on which greatest amount was pumped	1-Jun-13	
7. Gallons pumped on above day	1,106,000	gallons
8. Week during which greatest amount was pumped	w/e: July 21,2013	
9. Gallons pumped during above week	6,488,000	gallons
10. Gallons per day per service (3)	193	gallons
11. Consumption metered	183,173,000	gallons
12. Consumption metered	75.93%	Per cent of total consumption

13. Customers

Number being Supplied at Beginning of Year	Disconnected Since	Connected Since	Number being Supplied at Close of Year
2,625		12	2,637

Name of City, Town or District	Number of Customers as of December 31,2013
Oxford	2,637

(1) Represents Total Water Production During the Year
(2) Represents Average Daily Production
(3) Represents Metered Consumption per day per Customer, excluding Fire Services.

CONSUMPTION INFORMATION - Concluded

By Meter… SEE ATTACHED RATE TARIFF SHEETS DATED MAY 14, 2013

……

……

……

Per faucet, per year……

Per hose connection, per year,……

Per bath tub, per year,……..

Per shower bath, per year, ……..

Per foot tub, per year,……

Per wash tub, per year,……

Per urinal, per year,……..

Per water closet, per year,……

Per sink, per year,……

Per bowl, per year……..

Per private hydrant, per year,……

For sprinkler systems,……..

For water motors,……..

Per drinking fountain, per year,……..

Per public hydrant, per year,……

For watering troughs,……..

Minimum charge,……

Give any contact rates that are in force and state what discounts are allowed for prompt payment and what fines are charged for delayed payment……

……

……

Are payments required in advance?……

When are meters read and bills rendered?……

RATE FOR METERED SERVICE – SERVICE AREA A

AVAILABILITY

This rate is available to customers located in the following towns on the mains of the Company within the Company's franchise area, for all purposes except fire protection, subject to the Rules and Regulations of the Company: Cohasset (North Cohasset), Hingham, Hull and Norwell.

WATER CHARGE

A water charge will be made for all water used as registered by the meter, as set forth below:

Rate Per Hundred Cubic Feet (CCF)

RATE R1 - Applies to all metered residential usage by customers classified as such on the Company's records.

First 12 CCF per Quarter/ 4 CCF per Month	$2.874
Over 12 CCF per Quarter/ 4 CCF per Month	$3.915

RATE G1 - Applies to all metered commercial usage by customers classified as such on the Company's records, which do not qualify for Rate G4.

First 12 CCF per Quarter/ 4 CCF per Month	$2.107
Over 12 CCF per Quarter/ 4 CCF per Month	$2.638

RATE G2 - Applies to all metered public authority usage by customers classified as such on the Company's records, which do not qualify for Rate G4.

First 12 CCF per Quarter / 4 CCF per Month	$2.107
Over 12 CCF per Quarter/ 4 CCF per Month	$2.496

RATE G3 - Applies to all metered industrial usage by customers classified as such on the Company's records, which do not qualify for Rate G4. All Usage $2.239

RATE G4 - Applies to the total monthly usage by qualifying non-residential customers, classified as such on the Company's records, as per the following criteria: All Usage $1.572

Monthly billed amounts:	not less than 10,000,000 gallons, and not more than 40,000,000 gallons
Past 12 months total billed amount	not less than 120,000,000 gallons.

Usage which does not meet these criteria shall be charged at the appropriate G1, G2 or G3 Rate.

SERVICE CHARGE

In addition, all metered general water service customers shall pay a service charge on the size of each meter installed. Customers with multiple meters shall be charged for each meter at the indicated rate.

	Service Charge	
Size of Meter	**Per Month**	**Per Quarter**
5/8"	$ 15.61	$ 46.83
3/4"	$ 23.73	$ 71.19
1"	$ 38.09	$ 114.27
1 1/2"	$ 74.31	$ 222.93
2"	$ 117.71	$ 353.13
3"	$ 219.19	$ 657.57
4"	$ 363.27	$ 1,089.81
6"	$ 725.15	$ 2,175.45
8"	$ 1,159.77	$ 3,479.31

TERMS OF PAYMENT

The Company may render bills on either a quarterly or monthly basis. The above rates are payable within forty-five (45) days of the date of the bill.

Issued: April 1,2012 Effective: April 1, 2012

By: _____ Title: Vice President, Treasurer

Donald J. Morrissey

RATE FOR METERED SERVICE – SERVICE AREA B

AVAILABILITY

This rate is available to customers located in the following towns on the mains of the Company within the Company's franchise area, for all purposes except fire protection, subject to the Rules and Regulations of the Company: Millbury, Oxford.

WATER CHARGE

A water charge will be made for all water used as registered by the meter, as set forth below:

Rate Per Thousand Gallons(KGAL):

RATE R1 - Applies to all metered residential usage by customers classified as such on the Company's records.

First 9 KGAL per Quarter/ 3 KGAL per Month	$3.841
Over 9 KGAL per Quarter/ 3 KGAL per Month	$5.233

RATE G1 - Applies to all metered commercial usage by customers classified as such on the Company's records, which do not qualify for Rate G4.

First 9 KGAL per Quarter/ 3 KGAL per Month	$2.815
Over 9 KGAL per Quarter/ 3 KGAL per Month	$3.528

RATE G2- Applies to all metered public authority usage by customers classified as such on the Company's records, which do not qualify for Rate G4.

First 9 KGAL per Quarter/ 3 KGAL per Month	$2.815
Over 9 KGAL per Quarter/ 3 KGAL per Month	$3.337

RATE G3- Applies to all metered industrial usage by customers classified as such on the Company's records, which do not qualify for Rate G4. All Usage $2.992

RATE G4 - Applies to the total monthly usage by qualifying non-residential customers, classified as such on the Company's records, as per the following criteria: All Usage $2.102

Monthly billed amounts:	not less than 10,000,000 gallons, and not more than 40,000,000 gallons
Past 12 months total billed amount	not less than 120,000,000 gallons.

Usage which does not meet these criteria shall be charged at the G1, G2 or G3 Rate.

SERVICE CHARGE

In addition, all metered general water service customers shall pay a service charge on the size of each meter installed. Customers with multiple meters shall be charged for each meter at the indicated rate.

	Service Charge	
Size of Meter	**Per Month**	**Per Quarter**
5/8"	$ 15.61	$ 46.83
3/4"	$ 23.73	$ 71.19
1"	$ 38.09	$ 114.27
1 1/2"	$ 74.31	$ 222.93
2"	$ 117.71	$ 353.13
3"	$ 219.19	$ 657.57
4"	$ 363.27	$ 1,089.81
6"	$ 725.15	$ 2,175.45
8"	$ 1,159.77	$ 3,479.31

TERMS OF PAYMENT

The Company may render bills on either a quarterly or monthly basis. The above rates are payable within forty-five (45) days of the date of the bill.

Issued: April 1,2012 Effective: April 1,2012

By: _____ Title: Vice President, Treasurer

Donald J. Morrissey

RATE FOR PRIVATE FIRE PROTECTION

AVAILABILITY

This rate is available to customers located on the mains of the Company within the Company's franchise area for Private Fire Protection, subject to the Rules and Regulations of the Company.

RATE

	Per Year
For each service connection 4" or smaller	$ 513.47
For each service connection 6"	$ 1,077.88
For each service connection 8"	$ 1,868.07
For each service connection 10"	$ 2,884.02
For each service connection 12"	$ 4,125.73
For each privately owned fire hydrant serving Cohasset, Hingham, Hull, Millbury and Oxford	$ 735.39
For each privately owned fire hydrant outside Cohasset, Hingham, Hull, Millbury and Oxford	$ 924.04

TERMS OF PAYMENT

Bills shall be rendered and due monthly or quarterly in advance. The above rates are net and are payable within forty-five (45) days of the date of the bill. The Company reserves the right to disconnect the service of any customers not having their account paid in full within forty-five (45) days of the date of the bill.

SPECIAL PROVISIONS

(a) All water shall be used for fire protection purposes only.

(b) The Company reserves the right, if water is used in violation of (a) above, to install a meter on the connection at any time which will meet the requirements of the fire insurance companies. In the event a meter is installed, the established meter rates, including both water and service charges, will apply in lieu of the above rates for Private Fire Protection.

Issued: April 1,2012 Effective: April 1,2012

By: _____ Title: Vice President, Treasurer

RATE FOR PUBLIC FIRE PROTECTION

AVAILABILITY

This rate is available for Public Fire Protection only, and is subject to the Rules and Regulations of the Company.

RATES

For each Company owned public fire hydrant	$ 221.77
In addition, annual charges as follows:	
Town of Hingham	$ 354,424.00
Town of Hull	$ 203,951.00
Town of Cohasset	$ 16,788.00
Town of Millbury	$ 143,013.00
Town of Oxford	$ 99,487.00

TERMS OF PAYMENT

Bills shall be rendered and due monthly or quarterly in arrears. The above rates are payable within forty-five (45) days of the date of the bill.

Issued: April 1,2012 Effective: April 1,2012

By: _____ Title: Vice President, Treasurer

SALE FOR RESALE

AVAILABILITY

This rate is available to municipalities, or political subdivisions thereof, for resale to customers resident in territory contiguous to that served by the Company.

RATE

For all water taken, subject to the minimum charge as provided below:

$ 2.00 per 1,000 gallons

MINIMUM CHARGE

A variable minimum charge will apply based on the minimum monthly delivery occurring over the preceding 12 months, but not less than 100,000 gallons per month, times the currently allowed rate per 1,000 gallons.

Example: given a minimum monthly billing of 500,000 gallons, the minimum charge
Would be $2.00 x 500 = $1,000 per month.

TERMS OF PAYMENT

The Company may render bills on either a quarterly or monthly basis. The above rates are payable within forty-five (45) days of the date of the bill.

MISCELLANEOUS CHARGES

Drought Conditions

Termination and Restoration Fee – Business Hours*	$ 49.00
Termination and Restoration Fee – After Hours	$ 294.00

*Normal business hours are Monday through Friday, 8 am to 4 pm.

System Development Charge ("SDC")

Meter Size**	Capacity GPM	Ratio to 5/8" Meter	Fee
5/8"	20	1.00	$640
3/4"	30	1.50	$960
1"	50	2.50	$1,600
1 ½"	100	5.00	$3,200
2"	160	8.00	$5,120
3"	320	16.00	$10,240
4"	500	25.00	$16,000

*SDC is determined on a case by case basis for meter sizes greater than 4".

OTHER SERVICES

AVAILABILITY

This rate is available to all classes of customers located on the mains of the Company Subject to the Rules and Regulations of the Company.

Frozen Meters	Actual Cost of Meter	
Meter Test Fees 1" and less	$	50.00
Larger than 1"	$	75.00
Return Check Fee	$	20.00
Seasonal Meter Set & Turn On Fee	$	49.00
Seasonal Meter Removal Fee & Turn Off Fee	$	49.00
Turn-on Fee – Business Hours	$	49.00
After Hours Callout	$	294.00
Non-Payment Reconnect – Business Hours	$	49.00
Non-Payment Reconnect – After Hours	$	294.00
Theft of Service	$	1,000.00
(or triple the amount of damages which ever is greater)		
Cross Connection – One Device Testing	$	75.00
Each Additional	$	35.00

TERMS OF PAYMENT

The Company may render bills on either a quarterly or monthly basis. The above rates are payable within forty-five (45) days of the date of the bill.

The following surcharges are applicable to all metered customers located in the following towns on the mains of the Company within the Company's franchise area: Cohasset, (North Cohasset), Hingham, Hull and Norwell.

SURCHARGE

	Service Charge	
Size of Meter	Per Month	Per Quarter
5/8"	10.25	$30.75
3/4"	$15.59	$46.77
1"	$25.01	$75.03
1 1/2"	$48.79	$146.37
2"	$77.28	$231.84
3"	$143.91	$431.73
4"	$238.52	$715.56
6"	$476.11	$1,428.33
8"	$761.47	$2,284.41

Consumption Charge per 100 cubic feet for Water Treatment Facility Lease $0.7342

Consumption Charge per 100 cubic feet for Water Treatment Operation and Maintenance $1.0119

TERMS OF PAYMENT

The Company may render bills on either a quarterly or monthly basis. The above rates are payable within forty-five (45) days of the date of the bills.

Issued: October 22, 2012 Effective: November 1, 2012

By: _____ Title: Vice President, Treasurer

PURCHASED WATER SURCHARGE

AVAILABILITY

All metered general water service customers falling under the G4 rate designation receiving water service from the Millbury system, the City of Worcester interconnection or a combination of both sources. G4 customers will be billed at the customary G4 rate under the Company's approved tariff schedule for water service received from the Millbury system based on readings of the Millbury system meter.

SURCHARGE AMOUNT

In addition, any G4 customer who receives water supplied from the City of Worcester interconnection will be billed an amount equal to the difference in the cost of water purchased from the City of Worcester and the volumetric rate paid by a G4 customer as per the Company's tariff.

To the extent that multiple customers qualify for the G4 rate, the cost of water service from the City of Worcester interconnection will be allocated among the qualifying customers based upon the respective water usage in the applicable billing period.

The surcharge for each forthcoming year will be calculated on December 1 based on the previous 12 months of applicable actual invoices from the City of Worcester. The surcharge will be charged to the customer in equal installments over the calendar year beginning with the January billing.

TERMS OF PAYMENT

The Company renders bills on a monthly basis. The above rates are payable within forty-five (45) days of the date of the bill.

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 12-84 October 24, 2012

Petition of Aquarion Water Company of Massachusetts, Inc., for authorization and approval by the Department of Public Utilities to reduce its Water Treatment Plant Surcharge, pursuant to G.L. c. 164, § 94, and G.L. c. 165, § 2.

INTERLOCUTORY ORDER ON WATER TREATMENT PLANT SURCHARGE

APPEARANCE: Jon N. Bonsall, Esq.
Keegan Werlin LLP
265 Franklin Street
Boston, Massachusetts 02110-3113
FOR: AQUARION WATER COMPANY OF MASSACHUSETTS, INC.
Petitioner

I. INTRODUCTION

On October 5, 2012, Aquarion Water Company of Massachusetts, Inc. ("Aquarion" or "Company") filed with the Department of Public Utilities ("Department") a petition, pursuant to G.L. c. 164, § 94, and G.L. c. 165, § 2, to reduce its water treatment plant surcharge effective October 1, 2012.[1] The Company's petition included a proposed tariff for effect October 1, 2012. On October 22, 2012, the Company submitted M.D.P.U. No. 2-A First Revised tariff for effect November 1, 2012. The Department docketed this matter as D.P.U. 12-84.

In its petition, the Company states that on October 1, 2012, it completed a refinancing of certain capital bonds that had supported the construction of the water treatment plant. As a result of this refinancing, Aquarion proposes to reduce its annual debt service on the water treatment plant by approximately $926,000. This change in annual debt service results in a decrease in the water treatment facility surcharge currently billed to customers in Aquarion's service territories of Hingham, Hull, and Cohasset. If the proposed reduction is approved, customers served through a 5/8-inch meter using 62,500 gallons per year will experience a decrease of $3.64 per month in the water treatment plant surcharge, or a decrease of 8.2 percent on their total bill (Prefiled testimony of Troy M. Dixon at exhs. TMD-1; TMD-2).

---

[1] The original water treatment plant surcharge was approved by the Department in Massachusetts-American Water Company, D.P.U. 95-118 (1996).

II. ANALYSIS AND FINDINGS

Based upon our review of Aquarion's filing, the Department has determined that further investigation is necessary. Nonetheless, the Department finds that Aquarion should be permitted to implement the Company's proposed decrease before the conclusion of the Department's investigation so that the Company's ratepayers may receive the benefit of an immediate reduction to the water treatment plant surcharge. See Aquarion Water Company of Massachusetts, Inc., D.P.U. 08-27-B, at 18-21 (2010). Thus, the Company's proposed tariff is allowed.

III. ORDER

After review and consideration, it is

ORDERED: That the illustrative tariff M.D.P.U. No. 2-A First Revised filed by Aquarion Water Company of Massachusetts, Inc. for effect November 1, 2012 is ALLOWED; and it is

FURTHER ORDERED: That Aquarion Water Company of Massachusetts, Inc. shall comply with all other directives contained in this Order.

By Order of the Department,

/s/
Ann G. Berwick, Chair

/s/
Jolette A. Westbrook, Commissioner

/s/
David W. Cash, Commissioner

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 12-84 October 24, 2012

Petition of Aquarion Water Company of Massachusetts, Inc., for authorization and approval by the Department of Public Utilities to reduce its Water Treatment Plant Surcharge, pursuant to G.L. c. 164, § 94, and G.L. c. 165, § 2.

INTERLOCUTORY ORDER ON WATER TREATMENT PLANT SURCHARGE

APPEARANCE: Jon N. Bonsall, Esq.
Keegan Werlin LLP
265 Franklin Street
Boston, Massachusetts 02110-3113
FOR: AQUARION WATER COMPANY OF MASSACHUSETTS, INC.
Petitioner

I. INTRODUCTION

On October 5, 2012, Aquarion Water Company of Massachusetts, Inc. ("Aquarion" or "Company") filed with the Department of Public Utilities ("Department") a petition, pursuant to G.L. c. 164, § 94, and G.L. c. 165, § 2, to reduce its water treatment plant surcharge effective October 1, 2012.[1] The Company's petition included a proposed tariff for effect October 1, 2012. On October 22, 2012, the Company submitted M.D.P.U. No. 2-A First Revised tariff for effect November 1, 2012. The Department docketed this matter as D.P.U. 12-84.

In its petition, the Company states that on October 1, 2012, it completed a refinancing of certain capital bonds that had supported the construction of the water treatment plant. As a result of this refinancing, Aquarion proposes to reduce its annual debt service on the water treatment plant by approximately $926,000. This change in annual debt service results in a decrease in the water treatment facility surcharge currently billed to customers in Aquarion's service territories of Hingham, Hull, and Cohasset. If the proposed reduction is approved, customers served through a 5/8-inch meter using 62,500 gallons per year will experience a decrease of $3.64 per month in the water treatment plant surcharge, or a decrease of 8.2 percent on their total bill (Prefiled testimony of Troy M. Dixon at exhs. TMD-1; TMD-2).

---

[1] The original water treatment plant surcharge was approved by the Department in Massachusetts-American Water Company, D.P.U. 95-118 (1996).

II. ANALYSIS AND FINDINGS

Based upon our review of Aquarion's filing, the Department has determined that further investigation is necessary. Nonetheless, the Department finds that Aquarion should be permitted to implement the Company's proposed decrease before the conclusion of the Department's investigation so that the Company's ratepayers may receive the benefit of an immediate reduction to the water treatment plant surcharge. See Aquarion Water Company of Massachusetts, Inc., D.P.U. 08-27-B, at 18-21 (2010). Thus, the Company's proposed tariff is allowed.

III. ORDER

After review and consideration, it is

ORDERED: That the illustrative tariff M.D.P.U. No. 2-A First Revised filed by Aquarion Water Company of Massachusetts, Inc. for effect November 1, 2012 is ALLOWED; and it is

FURTHER ORDERED: That Aquarion Water Company of Massachusetts, Inc. shall comply with all other directives contained in this Order.

By Order of the Department,

/s/
Ann G. Berwick, Chair

/s/
Jolette A. Westbrook, Commissioner

/s/
David W. Cash, Commissioner

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 12-84 May 14, 2013

Petition of Aquarion Water Company of Massachusetts, Inc., for authorization and approval by the Department of Public Utilities to reduce its water treatment plant surcharge, pursuant to G.L. c. 164, § 94, and G.L. c. 165, § 2.

APPEARANCE: Jon N. Bonsall, Esq.
Keegan Werlin LLP
265 Franklin Street
Boston, Massachusetts 02110-3113
FOR: AQUARION WATER COMPANY OF MASSACHUSETTS, INC.
Petitioner

Martha Coakley, Attorney General
Commonwealth of Massachusetts
By: John J. Geary
Ronald J. Ritchie
Joseph W. Rogers
Assistant Attorneys General
Office of Ratepayer Advocacy
One Ashburton Place
Boston, Massachusetts 02108
Intervenor

Kerry Ryan, Esq.
Morrissey, Wilson & Zafiropoulos, LLP
35 Braintree Hill Office Park, Suite 404
Braintree, Massachusetts 02184
FOR: THE TOWN OF HINGHAM
Intervenor

James Lampke, Esq.
Town of Hull Law Department
115 North Street
Hingham, Massachusetts 02043
FOR: THE TOWN OF HULL
Intervenor

I. INTRODUCTION

On October 5, 2012, Aquarion Water Company of Massachusetts ("Aquarion" or "Company") filed with the Department of Public Utilities ("Department") a petition, pursuant to G.L. c. 164, § 94, and G.L. c. 165, § 2, to reduce its water treatment plant ("WTP") surcharge effective October 1, 2012.[1] The Company's petition included a proposed tariff for effect October 1, 2012. On October 22, 2012, the Company submitted M.D.P.U. No. 2-A First Revised tariff for effect November 1, 2012. The Department docketed this matter as D.P.U. 12-84.

On October 24, 2012, the Department issued an Interlocutory Order and allowed the Company's proposed M.D.P.U. No. 2-A First Revised tariff for effect November 1, 2012, subject to further investigation. The Department's Interlocutory Order stated that Aquarion should be permitted to implement the Company's proposed decrease before the conclusion of the Department's investigation so that the Company's ratepayers may receive the benefit of an immediate reduction to the WTP surcharge. Aquarion Water Company of Massachusetts, D.P.U. 12-84, Interlocutory Order (October 24, 2012).

On November 6, 2012, the Attorney General of the Commonwealth of Massachusetts ("Attorney General") filed a notice of intervention pursuant to G.L. c. 12, § 11E(a). On December 19, 2012, the Department granted intervenor status to the Towns of Hingham and Hull ("Hingham" and "Hull", together the "Towns").

---

[1] The original WTP surcharge was approved by the Department in Massachusetts-American Water Company, D.P.U. 95-118 (1996).

Pursuant to notice duly issued, the Department held a public hearing on December 19, 2012. On March 22, 2013, the Department held an evidentiary hearing. In support of its petition, the Company presented the testimony of Troy M. Dixon, the Company's director of rates and regulation. Aquarion submitted an initial brief on April 5, 2013. The Towns submitted a joint initial brief on April 8, 2013. The Company submitted its reply brief on April 22, 2013, and the Towns did not submit a reply brief. The evidentiary record consists of 25 exhibits and responses to two record requests.

II. BACKGROUND

On April 29, 1993, Aquarion, then known as Massachusetts-American Water Company ("Mass-American"), entered into an Administrative Consent Order with the Massachusetts Department of Environmental Protection. Under the terms of the Administrative Consent Order, the Company was responsible for constructing the WTP. Aquarion Water Company of Massachusetts, D.T.E. 05-94-A at 2 (2007). The Company's then-parent, American Water Works Company ("AWW"), formed Massachusetts Capital Resources Company ("MassCapital") as a wholly owned special-purpose company to finance and construct the WTP using a project finance approach.[2] D.T.E. 05-94-A at 2. On July 1, 1995, MassCapital purchased the partially constructed WTP from the Company and obtained access to $37.7 million in tax-exempt bonds through the Massachusetts Development Finance Agency

[2] Under a project finance approach, credit supporting the financing is based on revenues from an individual project, rather than through corporate or municipal credit. D.T.E. 05-94-A at 2; Massachusetts-American Water Company, D.P.U. 95-118, at 58 n.26 (1996).

("MDFA") to finance the construction. D.T.E. 05-94-A at 2; Massachusetts-American Water Company, D.P.U. 95-118, at 58-59 (1996). MassCapital entered into a ground lease with the Company and, in exchange, Mass-American entered into a 40.5-year operating lease for the WTP. D.P.U. 95-118 at 60.[3]

The WTP lease expense consists of the following elements: (1) a fixed basic rent component intended to cover debt service on the bonds; (2) a base percentage rent component intended to cover Aquarion Capital's equity investment; (3) a reduction for interest income earned on the debt service reserve fund required by the MDFA financing; (4) an adjustment factor set every five years to adjust for actual water production levels; (5) a working capital allowance; and (6) a gross-up factor for income taxes (Exhs. TMD at 4; TMD-4). The WTP lease expense, along with associated operating and maintenance expenses, are recovered through the WTP surcharge applicable to customers in the Company's Hingham district (i.e., Hingham, Hull, north Cohasset, and Norwell) (Exh. TMD-2). The WTP surcharge is designed to collect 67 percent of the WTP lease expense through a fixed charge that varies by meter size ("basic service charge rate") and 33 percent through a charge that varies by consumption ("volumetric rate") (Exh. TMD-2). See also D.T.E. 95-118, at 175.

---

[3] In April 2002, Aquarion Company purchased Mass-American and MassCapital, along with other AWW affiliates in Connecticut, New Hampshire, and New York. Thereafter, Mass-American's name was changed to Aquarion Water Company of Massachusetts, Inc., and MassCapital's name was changed to Aquarion Capital. D.T.E. 05-94-A at 4-5.

III. SURCHARGE REDUCTION PROPOSAL

On October 1, 2012, Aquarion Capital completed a refinancing of the MDFA bonds that supported the construction of the WTP (Exh. TMD at 4). Prior to the refinancing, Aquarion Capital's overall debt consisted of $29.905 million in MDFA bonds with a weighted average coupon rate of 6.85 percent (Exhs. TMD at 4; DPU 1-5). Aquarion Capital also held approximately $4.2 million of restricted cash associated with the debt service reserve fund, and a $5.7 million intercompany note receivable from its parent, Aquarion Company (Exhs. TMD at 4; DPU 1-5; DPU 1-6). As a result of the refinancing, Aquarion Capital obtained a $21.0 million, ten-year amortizing bank note, bearing 4.10 percent interest, and held by Peoples' United Bank (Exhs. TMD at 4; DPU 1-5; DPU 5-11, Att.). The issuance, combined with the liquidation of both the intercompany note receivable and the debt service reserve fund required under the MDFA financing, allowed Aquarion Capital to reduce the amount needed for refinancing with Peoples' United Bank (Exhs. TMD at 4; DPU 1-5; DPU 1-6).

As a result of the refinancing, Aquarion determined that its annual debt service associated with the WTP would decrease by $926,012 (Exhs. TMD at 4; TMD-1). This reduction consists of: (1) $1,005,253 to the base percentage rent component of the lease; (2) $8,413 in cash working capital allowance; and (3) $2,939 in associated income taxes on the cash working capital allowance; less (4) $90,593 in interest income that would be foregone by the elimination of the debt service reserve fund required under the former MDFA financing arrangement (Exhs. TMD at 4-5; TMD-1). Under the Company's proposal, customers served through a 5/8-inch meter using 62,500 gallons per year will experience a decrease of $3.64 per

month in the WTP surcharge, representing a decrease of 8.2 percent on their total bill (Exhs. TMD; TMD-1; TMD-2).

IV. POSITIONS OF THE PARTIES

A. Aquarion Water Company of Massachusetts

Aquarion argues that the Department should approve its petition because a financially analogous situation was previously approved in D.P.U. 95-118, and the Company's customers will benefit from a decrease to the annual debt service on the WTP of approximately $926,000 annually (Aquarion Brief at 3-4, Aquarion Reply Brief at 1-2). The Company maintains that in D.P.U. 95-118, the Department determined that it could, at its discretion, reopen the record for the purpose of recalculating the WTP surcharge to adjust for lower than anticipated WTP project costs (Aquarion Brief at 3, citing D.P.U. 95-118, at 57-58). Aquarion further argues that in D.T.E. 05-94, the Department exercised the discretion provided in D.P.U. 95-118, and approved a reduction to the WTP surcharge (Aquarion Brief at 3-4, Aquarion Reply Brief at 1-2).

Aquarion argues that it is instructive that both Hingham and Hull have stated their support for a reduction in the rates paid by the Company's customers, and that the Attorney General has not presented any opposition to the Company's petition (Aquarion Brief at 4, Aquarion Reply Brief at 1). The Company also notes that examination of the Company's witnesses during the evidentiary hearing focused primarily on the timing and nature of the refinancing, not the calculations or formulas that support the determination of the reduction (Aquarion Brief at 4). In addition, Aquarion maintains that although Aquarion Capital is not

regulated by the Department, the Company has nonetheless provided ample evidence to demonstrate that Aquarion Capital entered into the financial markets and completed its refinancing at an opportune time and after due consideration of the financing options available in the marketplace (Aquarion Brief at 4).

Finally, Aquarion argues that the Investigation by the Department of Public Utilities on its own Motion into the Effect of the Reduction in Federal Income Tax Rates Charged by Electric, Telephone, Gas, and Water Companies, D.P.U. 87-21 (1987), provides additional support for the Company's proposal (Aquarion Reply Brief at 2). The Company maintains that in D.P.U. 87-21, the Department held that it will determine, for each company, the impact that the reduction in the federal corporate tax rate will have on the company's retail rates and order an appropriate adjustment to reflect that reduction (Aquarion Reply Brief at 2, citing D.P.U. 87-21-A at 12). Aquarion contends that its petition in the instant proceeding accomplishes the same goal as that in D.P.U. 87-21-A, because the proposed reduction (1) benefits customers, (2) can be computed in a simple manner, (3) is significant, and (4) is known and measureable (Aquarion Reply Brief at 2).

B. Hingham and Hull

The Towns state that they are unopposed to the Company's petition and the reduction of the WTP surcharge (Towns' Brief at 1). Nonetheless, the Towns maintain that they are concerned as to whether there are additional savings that can be passed on to the ratepayers (Towns' Brief at 1). The Towns question whether, in addition to the refinancing at issue in this petition, there are any additional refinancing opportunities that Aquarion could pursue, and

whether the Company should have pursued the financing earlier to provide additional savings to the ratepayers (Towns' Brief at 1). Consequently, the Towns urge the Department to carefully consider whether additional reductions could be implemented (Towns' Brief at 1).

V. ANALYSIS AND FINDINGS

The WTP surcharge represents a rider on distribution rates, and is not a reconciling mechanism (Exh. TMD-2). See also D.P.U. 95-118, at 175-176. Nonetheless, the Department has consistently held that any cost savings associated with the WTP surcharge should ultimately benefit ratepayers. D.P.U. 12-84 Interlocutory Order at 2; D.T.E. 05-94-A at 9-12; D.T.E. 05-94, at 1-2; D.P.U. 95-118, at 57-58. The Department has reviewed the Company's calculations and assumptions regarding the proposed reduction to the WTP surcharge and finds that Aquarion has correctly calculated the revenue requirement reduction. The Department also finds that the Company has properly applied the WTP surcharge reduction in a manner consistent with cost allocation and rate design principles. Aquarion Water Company of Massachusetts, D.P.U. 11-43, at 243-245 (2012); D.T.E. 05-94-A at 13. Therefore, the Department approves Aquarion's revised WTP surcharge calculations.

The Department also examined whether Aquarion Capital exercised due diligence in its decision to refinance the MDFA bonds in the summer of 2012, as opposed to an earlier date (see, e.g., Tr. at 42-43; RR-DPU-1). The Department is aware that there are certain costs associated with a refinancing (Exh. DPU 1-4).[4] In addition, shifting market conditions make it

[4] For example, the costs associated with this refinancing are approximately $345,156, and include origination fees, title insurance, and legal fees relating to preparation, negotiation, and due diligence (Exh. DPU 1-4).

inherently difficult to determine the best time to execute a refinancing transaction (see, e.g., Tr. at 14-20; RR-DPU-1; RR-Hingham-1). Aquarion Capital states that it regularly monitors the capital markets in order to identify attractive financing opportunities (Tr. at 17; RR-DPU-1). In 2005, the Company's MDFA bonds became callable with a premium of two percent (RR-DPU-1). The record shows that the call premiums associated with the MDFA bonds, combined with the issuance costs, would have obviated any interest expense savings associated with refinancing at that time (see Exh. DPU 1-4; Tr. at 17-18; RR-DPU-1). Further, while the MDFA bonds became callable at par in 2007, the credit crunch of 2008 continued to make refinancing cost-prohibitive (RR-DPU-1). In July of 2012, Aquarion Capital determined that the markets for 20-year and 30-year fixed rate debt had reached their low and would increase thereafter (Tr. at 17; RR-DPU-1). As such, Aquarion Capital determined it was the appropriate time to refinance the remaining $29.9015 million of outstanding debt (Tr. at 17; RR-DPU-1). Therefore, based on the call features of the MDFA bonds, prevailing interest rates, and credit conditions, the Department finds that Aquarion Capital's decision to defer refinancing until July 2012 was reasonable.

The Towns raise the issue of whether there are any refinancing opportunities that Aquarion should pursue, in addition to the refinancing at issue in this petition. Regulated utility companies have an obligation to pursue cost-effective financings to the extent possible. See Aquarion Water Company of Massachusetts, D.P.U. 11-55, at 24-25 (2012); Blackstone Gas Company, D.T.E. 98-91, at 6 (1999). The Company states that it regularly monitors the capital markets to identify opportunities to refinance debt (Tr. at 17). Further, Aquarion

recently refinanced $9 million in long-term debt at favorable interest rates, which was incorporated into the Company's revenue requirement in its most recent rate case. D.P.U. 11-55; D.P.U. 11-43, at 204-205. In addition, the Company has three other debt issuances. One represents an MDFA loan with an effective interest rate of zero percent, and the two other issues carry interest rates of 9.64 percent and 7.71 percent, but include call premium requirements that make it economically unattractive to refinance before their maturity (Tr. at 36). See D.P.U. 11-55, at 205. Therefore, the Department finds that, at this time the Company has met its obligation to pursue, to the extent practicable, all cost-effective financings.[5]

VI. ORDER

After due notice, hearing, and consideration, it is

ORDERED: That the rates and charges set forth in M.D.P.U. No. 2-A, First Revised Sheet No. 29, of Aquarion Water Company of Massachusetts remain in effect until otherwise ordered; and it is

[5] While the Department is satisfied that Aquarion has sought and obtained favorable financing conditions here, we take this opportunity to remind all regulated utilities that they have an ongoing obligation to monitor the capital markets and seek opportunities to pursue cost-effective financings for the benefit of their ratepayers.

FURTHER ORDERED: That Aquarion Water Company of Massachusetts shall comply with all other directives contained in this Order.

By Order of the Department,

/s/
Ann G. Berwick, Chair

/s/
Jolette A. Westbrook, Commissioner

/s/
David W. Cash, Commissioner

An appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. G.L. c. 25, § 5.

THIS RETURN IS SIGNED UNDER THE PENALTIES OF PERJURY

Donald J. Morrissey — *Executive Vice President, Treasurer, Secretary and Clerk*

Donald J. Morrissey — *Director*

Charles V. Arlotte — *Director*

SIGNATURES OF ABOVE PARTIES AFFIXED OUTSIDE THE COMMONWEALTH OF MASSACHUSETTS MUST BE PROPERLY SWORN TO

State of Connecticut
County of Fairfield ~~as~~ Bridgeport, March 25, 2014

Then personally appeared Donald J. Morrissey, ~~Exec.~~ VP, Treasurer, Secretary, Clerk & Director of Aquarion Water Company of Massachusetts, and Charles V. Arlotte, Director of Aquarion Water of Massachusetts.

and severally made oath to the truth of the foregoing statement by them subscribed according to their best knowledge and belief.

Georgeanne F. Berg
Signature

11/30/16
Expiration of Commission

Notary Public ~~or Justice of the Peace~~

GEORGEANNE F. BERG
NOTARY PUBLIC
MY COMMISSION EXPIRES NOV. 30, 2016