

COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, SS

SUPERIOR COURT
C.A. NO. SUCV2013-03159-BLS2

TOWN OF HINGHAM,

Plaintiff,

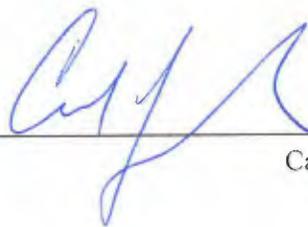
v.

AQUARION WATER COMPANY
OF MASSACHUSETTS, INC., and
AQUARION WATER CAPITAL
OF MASSACHUSETTS, INC.,

Defendants.

Expert Report of Carl Jenkins
Duff & Phelps, LLC

June 30, 2014



Carl Jenkins

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Glossary / Terms Used in this Report

Aquarion: Aquarion Company, the parent company of Aquarion Water Company of Massachusetts and Aquarion Water Capital of Massachusetts, Inc.

Aquarion Capital: Aquarion Water Capital of Massachusetts, Inc., the current owner of the Water Treatment Plant. Aquarion Capital was formerly known as the Massachusetts Capital Resources Company.

AWCCT: Aquarion Water Company of Connecticut, a wholly-owned subsidiary of Aquarion Company.

AWCMA: Aquarion Water Company of Massachusetts, a wholly-owned subsidiary of Aquarion Company. AWCMA was formerly known as the Massachusetts-American Water Company. AWCMA was the surviving entity of the 1989 merger of Massachusetts-American Water Company and Oxford Water Company into the Hingham Water Company.

AWCNH: Aquarion Water Company of New Hampshire, a wholly-owned subsidiary of Aquarion Company.

AWCNY: Aquarion Water Company of New York; a former wholly-owned subsidiary of Aquarion Company.

AWW: American Water Works Company, Inc.

Calculation Date: December 31, 2013.

Contributed Equity: The actual equity capital raised by the Hingham Water Company and invested into the Hingham Water System. The Contributed Equity can be calculated from the annual DPU reports as the sum of the Total Capital Stock, Premium on Capital Stock, and Surplus Invested in Plant accounts. The Contributed Equity can also be calculated from the company's audited financials as the sum of the Common Stock and Paid-In Capital accounts.

Contributed Equity Purchase Price: the Purchase Price based on the books and records of the Hingham Water System back to 1879. This methodology incorporates the actual equity invested into the Hingham Water System by all of the owners since 1879.

CIAC: Contributions in Aid of Construction.

Duff & Phelps: Duff & Phelps, LLC.

EBITDA: Earnings before Interest, Taxes, Depreciation, and Amortization.

GAAS: generally accepted auditing standards.

Greenwich Water System: Greenwich Water System, Inc., a former owner of the Hingham Water Company.

Gross Plant: the sum of the Plant Investments and General Equipment accounts in the DPU reports.

Hingham: the Town of Hingham.

Hingham Service Area: the portion of Aquarion Water Company of Massachusetts serving Hingham, Hull, Cohasset, and Norwell.

Hingham Water System: the combination of the Hingham Service Area and the Water Treatment Plant.

Holdings: Aquarion Holdings, a wholly-owned subsidiary of Macquarie Utilities Inc. and the parent company of Aquarion Company.

Kelda: Kelda Group plc, a former owner of Aquarion Company.

Mass DPU: the Massachusetts Department of Public Utilities.

Mass-American: Massachusetts-American Water Company, currently known as AWCMA.

Mass Capital: the Massachusetts Capital Resources Company, currently known as Aquarion Capital.

Morrissey Wilson: Morrissey Wilson and Zafiropolous, LLP.

MUI: Macquarie Utilities Inc., the current owner of Aquarion Company (through Aquarion Holdings).

Net Plant: Gross Plant less accumulated depreciation. In the DPU Reports, accumulated depreciation is referred to as depreciation reserve.

Net Plant Purchase Price: the purchase price of the Hingham Water System based on the Net Plant of the Hingham Water System.

Oxford/Millbury Service Area: the portion of Aquarion Water Company of Massachusetts serving Oxford and Millbury.

Purchase Price: the purchase price of the water system based on the actual equity invested by the current controlling owner of the Hingham Water System.

Putnam: F. L. Putnam & Co. Inc., a former owner of the Hingham Water Company.

Statute: Chapter 139 of the Massachusetts Acts of 1879.

TEV: Total Enterprise Value, the market value of a business. It is the sum of debt and equity in a business.

Town: the Town of Hingham.

Water Treatment Plant: the water treatment facility located in Hingham, currently owned by Aquarion Water Capital of Massachusetts, Inc.

Willamette: Willamette Management Associates.

Willamette Report: The Formula Purchase Price Analysis of the Hingham Water System as of December 31, 2011 prepared by Willamette Management Associates.

Willamette Purchase Price: The purchase price calculated by Willamette Management Associates in the Willamette Report.

I. Introduction

1. Duff & Phelps, LLC (“Duff & Phelps”) has been retained by the Town of Hingham (“Hingham” or the “Town”) and Morrissey Wilson and Zafiropolous, LLP (“Morrissey Wilson”), counsel to the Town, to address the purchase price (the “Purchase Price”) of the water system in Hingham (the “Hingham Water System”) under Chapter 139 of the Massachusetts Acts of 1879 (the “Statute”) as of December 31, 2013 (the “Calculation Date”), and thereafter. I have four opinions, each of which is discussed below.
2. This report was prepared by me and other personnel of Duff & Phelps, working under my supervision. Duff & Phelps is being compensated for the services of its personnel on an hourly time basis. The hourly rates for personnel working on this engagement range from \$150 to \$550 per hour; payment is not contingent on the outcome of this litigation. A summary of my opinions and analyses relating to this matter are set forth in this Report. To the extent that additional information is discovered, I may amend or supplement my opinion as necessary. If expert testimony is requested I will serve as an expert witness. If I am asked to testify at trial I may illustrate my testimony with demonstration aids such as graphs, charts, and/or slides based on information contained in this report.
3. My opinions are based upon my experience as well as the information obtained through my own research, information available in case documents, and information provided by the Town. My opinions are expressed to a reasonable degree of professional certainty. In preparation of this report, I spoke with Jonathan Asher and Edward Siegfried, members of Hingham’s Water Company Acquisition Study Committee, Irma H. Lauter, Chairman of the Hingham Board of Selectmen, Bruce Rabuffo, former Chairman of the Hingham Board of Selectmen, Ted C. Alexiades, Town Administrator for Hingham, and counsel from Morrissey Wilson. The general categories of documents that I considered in this matter include but are not limited to the following (see Appendix A for a complete list of documents considered):

- Historical financials and financial statements;
 - Regulatory Filings and Regulatory Decisions;
 - Historical Documents related to the Hingham Water System, and
 - The Formula Purchase Price Analysis of the Hingham Water System by Willamette Management Associates (“Willamette”) dated June 29, 2012.
4. This report has been prepared in connection with the litigation matter referenced on the cover page hereof. This report is to be used solely for the purposes of the subject litigation and is not to be used or relied upon for any other purpose without the express written consent of Duff & Phelps.
5. While my testimony may involve reference to valuation reports, accounting records, financial statements and other documents, the analysis is not an audit or review in accordance with generally accepted auditing standards (“GAAS”) of such reports, financial statements and records.

A. Qualifications of Duff & Phelps and the Designated Expert Witness

6. Duff & Phelps is a leading provider of independent financial advisory and investment banking services, principally in the areas of valuation, transactions, financial restructuring and dispute consulting. Duff & Phelps has more than 1,000 employees worldwide through offices in North America, Europe and Asia.
7. My experience as an expert is set forth in my Curriculum Vitae and testimony experience, attached as Appendix B. I am the Global Leader of Commercial Disputes in the Dispute Consulting Services Group of Duff & Phelps, which provides public and private sector clients with investigative consulting, financial analysis and forensic accounting. My experience includes, but is not limited to, providing audit and tax related services, valuations, M&A consulting, client advisory services and litigation consulting, which includes engagements concerning lost profits, intellectual property, forensic accounting and expert testimony.
8. I am a Certified Public Accountant Accredited in Business Valuation (CPA/ABV), Certified Fraud Examiner (CFE) and a Certified Anti-Money Laundering Specialist (CAMS). I obtained a Masters in Taxation from Bentley University in Waltham, Massachusetts in 1982 and a Bachelor of Science

in Business Administration with a concentration in accounting and finance from Boston University in Boston, Massachusetts in 1978.

II. Summary

9. I have four opinions related to the Purchase Price of the Hingham Water System under the Statute.
10. **Opinion No. 1: The Purchase Price for the Hingham Water System based on the actual equity invested by the current controlling owner of the Hingham Water System is \$58,629,875.** I calculated the Purchase Price incorporating the actual equity invested by Macquarie Utilities, Inc., the current controlling owner of the Hingham Water System.
11. **Opinion No. 2: The Contributed Equity Purchase Price for the Hingham Water System is \$51,727,051.** I calculated the Purchase Price based on the books and records of the Hingham Water System back to 1879. This methodology incorporates the actual equity invested into the Hingham Water System by all of the owners since 1879 (i.e., the sum of all the equity capital raised since 1879).
12. **Opinion No. 3: The Purchase Price calculated by Willamette Management Associates (the “Willamette Purchase Price”) is flawed in several respects. Correcting these errors results in a Net Plant Purchase Price of \$58,420,742.** The errors in the Willamette Purchase Price include: (1) using gross plant instead of net plant, (2) assuming the current owner should receive a return on assets funded by debt, and (3) adding to the purchase price costs associated with intangible assets.
13. **Opinion No. 4: The Purchase Price for the Hingham Water System based on the actual equity invested by the current controlling owner of the Hingham Water System, excluding the water treatment facility in Hingham (the “Water Treatment Plant”), is \$34,717,871; The Contributed Equity Purchase Price, excluding the Water Treatment Plant, is \$20,711,451; The Net Plant Purchase Price, excluding the Water Treatment Plant, is \$27,181,142.** I

understand that the purchase of the Water Treatment Plant is in dispute. Therefore, I calculated the purchase price of the Hingham Water System excluding the Water Treatment Plant.

14. The approach I would use to calculate the purchase price under the statute would be Opinion No. 1. However, depending upon the Court's interpretation of the Statute, Opinion No. 1, 2 or 3 could each be a valid approach.

III. The Hingham Water System

A. Description of the Hingham Water System

15. The Hingham Water System is comprised of two components: (1) the portion of Aquarion Water Company of Massachusetts ("AWCMA") serving Hingham, Hull, Cohasset, and Norwell (the "Hingham Service Area"), and (2) the Water Treatment Plant, currently owned by Aquarion Water Capital of Massachusetts, Inc. ("Aquarion Capital," f.k.a. Massachusetts Capital Resources Company).
16. AWCMA is a Massachusetts water company that serves approximately 19,000 customers across six communities,¹ and is regulated by the Massachusetts Department of Public Utilities (the "Mass DPU").² AWCMA consists of two distinct service areas. The Hingham Service Area serves more than 12,800 customers and a population of over 32,000 in Hingham, Hull, Cohasset, and Norwell.³ The portion of AWCMA not covered by the Hingham Service Area (the "Oxford/Millbury Service Area") serves approximately 6,300 customers and a population of over 14,700 in Oxford and Millbury.⁴ AWCMA is a wholly-owned subsidiary of Aquarion Water Company. In addition to AWCMA, Aquarion Water Company owns Aquarion Water Company of Connecticut ("AWCCT") and Aquarion Water Company of New Hampshire ("AWCNH").

¹ AWCMA 2013 Audited Financials [AQ-033089 at -33098].

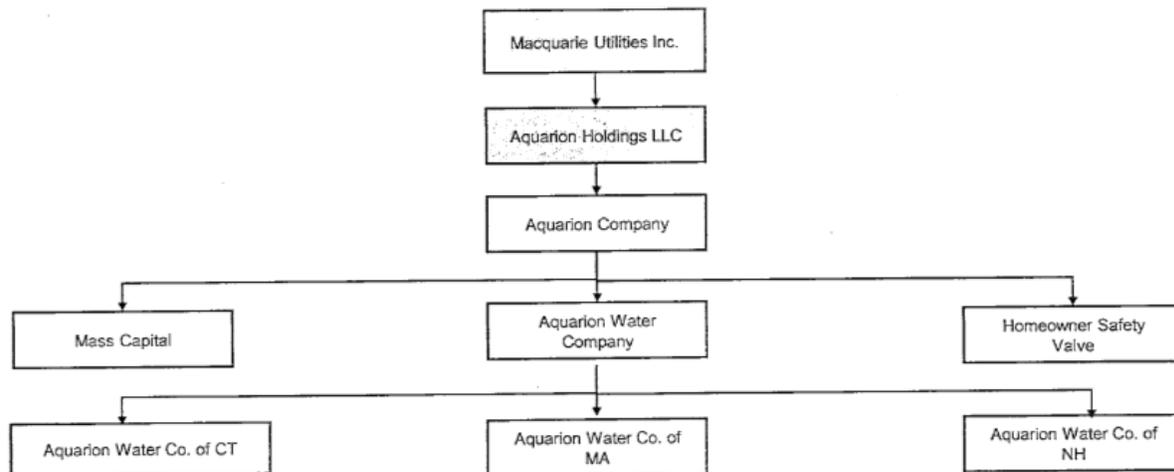
² AWCMA 2013 Audited Financials [AQ-033089 at -33098].

³ AWCMA 2013 DPU Return, Table 103 and 415.

⁴ AWCMA 2013 DPU Return, Table 415.

17. Aquarion Water Company is a wholly-owned subsidiary of Aquarion Company (“Aquarion”).⁵ In addition to Aquarion Water Company, Aquarion owns Aquarion Capital (shown in the figure below as “Mass Capital”) and Homeowner Safety Valve Company. Aquarion is a wholly-owned subsidiary of Aquarion Holdings, LLC (“Holdings”), which is a wholly-owned subsidiary of Macquarie Utilities Inc. (“MUI”).⁶ This organizational structure is depicted below.⁷

Figure 1: Hingham Water System Organizational Structure



B. Company Formation and Early History

18. The idea of introducing pure water supply to Hingham was first considered in the early 1870s.⁸ In subsequent years, the town commissioned a survey of Accord Pond and developed estimates of the cost to the Town of constructing a water system.⁹ There were questions in the Town regarding the feasibility of constructing a water system, the cleanliness and capacity of the water supply, and the

⁵ AWCMA 2013 Audited Financials [AQ-033089 at -33098].

⁶ AWCMA 2013 Audited Financials [AQ-033089 at -33098].

⁷ Exhibit 1 to the Deposition of Charles V. Firlotte (May 6, 2014).

⁸ Seymour, Charles W.S. “History of the Town of Hingham, Massachusetts: Water Works,” 1893, at p. 261.

⁹ Seymour, Charles W.S. “History of the Town of Hingham, Massachusetts: Water Works,” 1893, at p. 262-263.

cost estimates.¹⁰ On several occasions between 1876 and 1878, the Hingham Town Meeting voted down an act to supply the Town with pure water.¹¹

19. The Hingham Water Company was formed on March 21, 1879 by an act of the Massachusetts Legislature.^{12,13} Chapter 139 of the Massachusetts Acts of 1879 is titled, “An Act to Incorporate the Hingham Water Company,” and it gave the Hingham Water Company the right to take, hold, and distribute to Hingham the waters of Accord Pond. In addition, Chapter 139 includes a purchase provision for the Town of Hingham (see Section IV of this Report for the Statute language).
20. The first meeting of the Hingham Water Company was held on August 9, 1879.¹⁴ The act of incorporation was read and accepted, and the capital stock of the company (i.e., the amount of money the company was permitted to raise from equity investors) was initially fixed at \$80,000.¹⁵ In addition, a communication was read from Messrs. Goodhue and Birnie, in which they proposed to build the works for \$70,000.¹⁶
21. The Hingham Water Company began construction in 1879, and the company first began to distribute and sell water on July 3, 1880.¹⁷ As anticipated, the cost of building the water system was paid for entirely with the equity capital provided by its shareholders. The first Treasurer’s report appears to be as of June 30, 1880 and shows cash received from stockholders of \$37,130 and cash paid for construction of \$34,497.¹⁸ This also appears to be the first financial statement of any kind produced by the Hingham Water Company.

¹⁰ Seymour, Charles W.S. “History of the Town of Hingham, Massachusetts: Water Works,” 1893, at p. 264.

¹¹ Seymour, Charles W.S. “History of the Town of Hingham, Massachusetts: Water Works,” 1893, at p. 265.

¹² Seymour, Charles W.S. “History of the Town of Hingham, Massachusetts: Water Works,” 1893, at p. 265.

¹³ Massachusetts Acts of 1879, Chapter 139, p. 489-493.

¹⁴ [AQ-WTP 016325-16327]

¹⁵ [AQ-WTP 016325-16327]

¹⁶ [AQ-WTP 016325-16327]

¹⁷ [AQ-000001 at -003]

¹⁸ [AQ-WTP 016343]

Figure 2: Hingham Water Company Treasurer's Report as of June 30, 1880¹⁹

Copy of Treasurer's report.

Stackes Whitton Treas^r in &c with the Hingham Water Co.
to June 30. 1880.

Treasurer's
Account.

Debit		
For cash received from assessments on Capital		\$37,130.00
Credit		
By cash paid in account of construction of works		\$34,497.00
" " " for Engineering and Superintendence		840.25
" " " " advertising and printing		29.50
" " " " books		9.00
" " " " Postages and stamps	7.65	
" " " " use of Living Hall	12.00	
" " " " recording location of lands taken	1.40	21.05
" " " " salary of Treasurer		50.00
		35,446.80
Balance of cash on hand July 1 st		1,683.20
		\$37,130.00

Hingham, July 28. 1880.
(Signed) Stackes Whitton, Treas^r.

22. From a financial statement perspective, the cash received from stockholders of \$37,130 is consistent with what we could consider “common stock” and “paid-in capital” on modern-day financial statements.²⁰ In finance terms, the \$37,130 is the amount of equity invested in the Hingham Water Company by its shareholders from buying stock issued by the company.
23. In a special meeting of stockholders held September 27, 1880, it was voted to increase the capital stock of the company from \$80,000 to \$120,000 to extend the water system pipes to Nantasket and

¹⁹ [AQ-WTP 016343]

²⁰ On modern-day financial statements common stock typically reflects the par value of common stock raised, while paid-in capital reflects the amount over par value that was paid by the investors for the common stock.

Nantasket Beach.^{21,22} The additional stock was to be offered first to current stockholders, with any remainder offered to the public.²³

24. The Treasurer's report as of June 30, 1881 showed additional cash received from stockholders during the year of \$66,870 and additional cash paid for construction during the year of \$51,182.²⁴ Through June 30, 1881, the entire cost of the Hingham Water System had been paid for by the company's shareholders.
25. The first record of any borrowing by the company was \$3,000 in the January 25, 1883 meeting of the directors.²⁵ In a special meeting of stockholders on May 7, 1883, the stockholders voted to approve the issuance of coupon bonds or notes in an amount not exceeding \$60,000. The bonds paid interest of five percent per annum, and were to be offered first to the existing stockholders of the company.²⁶ In a special meeting on October 13, 1885, the issuance of an additional \$40,000 in five percent coupon bonds was approved.²⁷
26. The first dividends for common stock shareholders were declared by the Hingham Water Company on July 25, 1881,²⁸ approximately one year after the company first began to distribute and sell water, and less than two years after the first meeting of the Hingham Water Company. The initial dividends were paid at an annual rate of 5 percent of the equity invested by the shareholders,

²¹ [AQ-WTP 016348-350]

²² An Act of the Legislature in 1881 authorized the Company to extend its pipes to Nantasket Beach, Cohasset, and Hull. See Seymour, Charles W.S. "History of the Town of Hingham, Massachusetts: Water Works," 1893, at p. 265, and Massachusetts Acts of 1881, Chapter 59, p. 389-390; In 1924, the Company was authorized to extend its pipes through Norwell. See Massachusetts Acts of 1924, Chapter 168, p. 155-156.

²³ [AQ-WTP 016350]

²⁴ [AQ-WTP 016363]

²⁵ [AQ-WTP 016384]

²⁶ [AQ-WTP 016390-91]

²⁷ The minutes of that meeting also discuss the potential impact of the increased interest charge on the dividends paid to the stockholders. [AQ-WTP 016424-425]

²⁸ [AQ-WTP 016360]

generating a five percent return on their investment.²⁹ Starting the following year, the dividends were increased to 6 percent per year, generating a six percent return on their investment.³⁰ Dividends were paid at 6 percent per year every year through 1913, after which the percentage dividend payout varied from year to year.³¹

C. Financial Statements

27. As illustrated above, the first Treasurer's report is a basic financial summary of the Hingham Water Company on a cash basis. That is, it simply lists the cash inflows and cash outflows over the prior year, culminating in a cash balance at the end of the year that would carry into the next year. This simple, one statement cash-basis reporting continued for the first few years, and it was not until 1885 that the first instance occurs of a "Profit and Loss" statement, an "Assets and Liabilities" statement and a "Balance Sheet" statement.³² These statements as portrayed in the Treasurer's report are not consistent with modern-day financial statements. For example, while the names "Profit and Loss" and "Balance Sheet" are used today to describe certain financial statements,³³ the terms and components of these financial statements today do not completely match the terms and components of the statements as used in 1885 on the Treasurer's report.
28. In 1923, the Mass DPU approved the Uniform Classification of Accounts for Water Companies, standardizing the accounts and records of Massachusetts water companies.³⁴ It appears that the

²⁹ Dividends were paid semi-annually in the amount of \$2.50 per share, each share having a par value of \$100. [AQ-WTP 016360, -369, -373]

³⁰ Dividends of 3 percent were paid semi-annually [AQ-WTP 016384]

³¹ [AQ-032115, -119]

³² [AQ-WTP 016417-418 and AQ-WTP 016436-441]

³³ The name "Assets and Liabilities" is often used today to mean the same financial statement as the "Balance Sheet."

³⁴ 220 CMR 52.00: Uniform System of Accounts for Water Companies (July 12, 1923).

Hingham Water Company began preparing financial statements in 1921 that were consistent with the method outlined by the Mass DPU in 1923.³⁵

D. Company Ownership: 1879 through the present

29. The Hingham Water Company was formed in 1879. With the exception of a small portion of the capital stock that was taken by certain contractors, the initial shareholders were all residents of Hingham and their immediate personal friends.³⁶ On November 27, 1928, a proposal by F. L. Putnam & Co. Inc. (“Putnam”) to take all the stock of the Hingham Water Company that was offered was found to be acceptable by the directors of the company,³⁷ and by February of 1929, 4359 of the 4400 shares of the Hingham Water Company were owned by Putnam.³⁸ During 1929, majority ownership of the Hingham Water Company was transferred from F. L. Putnam to Greenwich Water & Gas System, Inc., and as of August 5, 1929, Greenwich Water & Gas held 4369 of the 4400 shares.³⁹ By 1939, Greenwich Water & Gas had acquired 100 percent ownership of the Hingham Water Company.⁴⁰ Between 1939 and 1958, ownership was transferred from Greenwich Water & Gas to Greenwich Water System, Inc. (“Greenwich Water System”).⁴¹ American Water Works Company, Inc. (“AWW”) was incorporated in 1936 as a holding company for stocks and securities of water utility companies, and by 1949, AWW owned the Greenwich Water System.⁴²

³⁵ [AQ-WTP 016958-961 and AQ-WTP 016976-980]

³⁶ Seymour, Charles W.S. “History of the Town of Hingham, Massachusetts: Water Works,” 1893, at p. 270.

³⁷ [AQ-WTP 013329]

³⁸ [AQ-WTP 012272]

³⁹ [AQ-WTP 013419]

⁴⁰ [AQ-WTP 012956]

⁴¹ [AQ-WTP 013631]

⁴² 25 T.C. 903 (1956). American Water Works Company, Inc. v. Commissioner Decision dated January 31, 1956.

30. In 1989, Mass DPU approved the merger of Hingham Water Company, Oxford Water Company, and Massachusetts-American Water Company.⁴³ Prior to the merger, 100 percent of the common stock of the three companies was held by Greenwich Water System, a wholly-owned subsidiary of American Water Works Company, Inc. (“AWW”). Under the merger agreement dated June 15, 1989, the Hingham Water Company would assume all of the assets and liabilities of the Oxford Water Company and the Massachusetts-American Water Company, and exchange the outstanding shares of common stock of the merging companies for an equal number of shares in the common stock of the surviving corporation.⁴⁴ On the effective date of the merger, the Hingham Water Company was to change its name to Massachusetts-American Water Company (“Mass-American,” currently known as AWCMA).⁴⁵
31. In 1994, AWCMA’s predecessor, Mass-American, began construction of the Water Treatment Plant.⁴⁶ Aquarion Capital’s predecessor, Massachusetts Capital Resources Company (“Mass Capital”), was formed in 1995 as a wholly-owned subsidiary of American Water Works “for the sole purpose of acquiring, developing, financing, constructing, and leasing the Water Treatment Plant.”⁴⁷ In August 1995, after construction of the Water Treatment Plant had begun, it was acquired from Mass-American by Mass Capital (a sister company). The price paid was approximately \$17.2 million, equivalent to the accumulated costs incurred by Mass-American as of the closing date of the transaction.⁴⁸ Prior to this sale, an engineering report indicated that the Water Treatment Plant was approximately 45 percent complete.⁴⁹

⁴³ D.P.U. 89-134, Order dated December 29, 1989, at p. 11.

⁴⁴ D.P.U. 89-134, Order dated December 29, 1989, at p. 2.

⁴⁵ D.P.U. 89-134, Order dated December 29, 1989, at p. 2.

⁴⁶ D.P.U. 95-118, Order dated May 31, 1996, at p. 20.

⁴⁷ Massachusetts Capital Resources Company 1995 Audited Financials [AQ-023759 at -3765].

⁴⁸ Massachusetts Capital Resources Company 1995 Audited Financials [AQ-023759 at -3765].

⁴⁹ Engineering Feasibility Report dated July 28, 1995 (Appendix B to the MIFA Revenue Bond Offering Memo dated July 1, 1995), [AQ-025744 at -5748].

32. A letter from Price Waterhouse LLP dated July 5, 1995 provides additional discussion regarding the sale-leaseback arrangement that was set up in connection with the transfer of the Water Treatment Plant out of Mass-American. Price Waterhouse LLP had been asked to provide “an overview of the technical accounting guidance related to certain aspects of the proposed sale-leaseback,” specifically focusing on the impact of certain lease provisions on Mass-American’s ability to account for the transaction as an operating lease.⁵⁰ The letter states that Mass-American’s objectives “include removing the water treatment plant from its rate base and balance sheet.”⁵¹ A sale-leaseback agreement was created and structured in order to have the lease classified as an operating lease.
33. On August 29, 2001, Aquarion Company, a subsidiary of Kelda Group plc (“Kelda”), entered into purchase agreements with AWW and Greenwich Water System to acquire five AWW subsidiaries, including Mass Capital and Mass-American, for a total of approximately \$118 million in cash, plus the assumption of approximately \$115 million in debt.⁵² The operations acquired in the transaction served approximately 64,000 customer accounts.⁵³
34. On December 31, 2001, Greenwich Water System merged into AWW, and AWW assumed the rights and obligations of Greenwich Water System under the purchase agreements.⁵⁴ The transactions closed on April 25, 2002, with American Water Works transferring ownership of Mass Capital, Mass-American, Connecticut-American Water Company, New York-American Water

⁵⁰ Exhibit C to the Facility Lease Agreement dated July 1, 1995 [AQ-025910 at -5989].

⁵¹ Exhibit C to the Facility Lease Agreement dated July 1, 1995 [AQ-025910 at -5989].

⁵² American Water Works Company, Inc. Press Release dated August 30, 2001, “American Water Works Company’s New England Operations to be Acquired by Kelda Group PLC, Aquarion.”; Sale of Connecticut-American [AQ-028105-AQ-028491]; Sale of Hampton Water Works [AQ-028492-AQ-028834]; Sale of Mass-American [AQ-028835-AQ-029154]; Sale of NY-American [AQ-029155-AQ-029430]; Sale of Mass-Capital [AQ-031263-AQ-031543]

⁵³ American Water Works Company, Inc. Press Release dated August 30, 2001, “American Water Works Company’s New England Operations to be Acquired by Kelda Group PLC, Aquarion.”

⁵⁴ Sale of Connecticut-American [AQ-028105 at -028427]; Sale of Hampton Water Works [AQ-028492 at -028795]; Sale of Mass-American [AQ-028835 at 029118]; Sale of NY-American [AQ-029155 at -029396]; Sale of Mass-Capital [AQ-031263 at -031492]

Company, and Hampton Water Works Company to Aquarion.⁵⁵ After the transaction, Mass-American changed its name to AWCMA and Mass Capital changed its name to Aquarion Capital.⁵⁶ As of December 31, 2013, AWCMA was a wholly-owned subsidiary of Aquarion Water Company, which was wholly-owned by Aquarion.⁵⁷ As of December 31, 2013, Aquarion Capital was a wholly-owned subsidiary of Aquarion.

35. In 2007, Kelda sold Aquarion to MUI at a Total Enterprise Value (“TEV”) of approximately \$819 million.⁵⁸ As of December 31, 2013, MUI owned 100 percent of Aquarion, and through Aquarion owned 100 percent of the Hingham Water System.⁵⁹

IV. Hingham Water Company Purchase Provision in the Statute

36. Section 11 of Chapter 139 of the Massachusetts Acts of 1879 states:

*“The Town of Hingham shall have the right at any time during the continuance of the charter hereby granted, to purchase the corporate property, and all the rights and privileges of said company at the actual cost of the same, together with interest thereon at a rate not exceeding ten per centum per annum, said cost to include all actual loss or damage paid or suffered by said company for injury to person or property, deducting from said cost any and all dividends which may have been paid by said corporation, or at such a price as may be mutually agreed upon between said corporation and the town of Hingham.”*⁶⁰

37. I understand that there are three primary components of the Purchase Price calculation as described in the Statute. First, there is a measure of “actual cost” of the “corporate property, and all the rights and privileges of said company.” Second, there is an “interest”, or rate of return, component. Third,

⁵⁵ Sale of Connecticut-American [AQ-028105 at -028427]; Sale of Hampton Water Works [AQ-028492 at -028795]; Sale of Mass-American [AQ-028835 at 029118]; Sale of NY-American [AQ-029155 at -029396]; Sale of Mass-Capital [AQ-031263 at -031492]

⁵⁶ Capital IQ Transaction Detail (Transaction ID IQTR8682237). Connecticut-American Water Company also changed its name to Aquarion Water Company of Connecticut (“AWCCT”), New York-American Water Company changed its name to Aquarion Water Company of New York (“AWCNY”), and Hampton Water Works Company changed its name to Aquarion Water Company of New Hampshire (“AWCNH”).

⁵⁷ AWCMA 2013 Audited Financials [AQ-033089 at -33098]

⁵⁸ See Figure 3.

⁵⁹ AWCMA 2013 Audited Financials [AQ-033089 at -33098].

⁶⁰ Massachusetts Acts of 1879, Chapter 139, p. 492.

there is an adjustment to account for the return that has already been earned through the payment of dividends.

V. Purchase Price of the Hingham Water System

38. I calculated the Purchase Price of the Hingham Water System under the Statute using the following four steps:

- Determine the equity invested by the current owner of the Hingham Water System
- Calculate interest, or the return, on the equity invested
- Determine dividends received by the current owner of the Hingham Water System
- Determine current debt outstanding

39. The Purchase Price is calculated as (1) the total equity investment made by the owner of the Hingham Water System, (2) plus a ten percent return on the equity invested, (3) less dividends already paid to the owner of the Hingham Water System, (4) plus the retirement of all outstanding debt of the Hingham Water System.

40. This calculation methodology (1) ensures the recovery of the money invested in the Hingham Water System by its current owner, and (2) ensures a return of 10 percent on all of the money invested in the Hingham Water System by the current owner.

A. Step 1- Estimate of Actual Equity Invested in the Hingham Water System

41. I have used the current owner's actual equity investment, the cash invested by the current owner in owning the Hingham Water System, as the "actual cost" of the "corporate property, and all the rights and privileges of said company" component of the Purchase Price calculation. It is reasonable to expect that any payment by the Town for the Hingham Water System will be paid to the current owner of the Hingham Water System (either through direct payment by the Town to the owner or through the payment of a dividend from the subsidiaries). It is therefore appropriate that the "actual cost" component would reflect the investment made by the current owner to acquire the Hingham Water System.

42. The Hingham Water Company did not use debt to finance the initial construction of the Hingham Water System. Therefore, the cost of the system was borne entirely by the stockholders with the initial direct capital contributions. This interpretation of “actual cost,” meaning the amount of money invested by the stockholders, is consistent with the deduction of dividends as specified by the Statute. Because the “actual cost” is the amount invested by the stockholders, the Purchase Price only needs to account for returns already received by stockholders. If on the other hand, “actual cost” were meant to include the cost of the assets of the water system including the portion of the assets financed by debt, then the Statute would have subtracted interest paid on debt (i.e., returns already received by debt holders) in addition to dividends (i.e., returns already received by stockholders).
43. In fact, many of the bondholders in the Hingham Water System have already recovered their investment, along with the interest specified in the bond agreements. For example, the debt issued in 1883 and 1884 was fully recovered, with interest, by 1903.⁶¹ Similarly, the debt issued in 1886 and 1889 was fully recovered, with interest, by 1906 and 1909, respectively.⁶²
44. MUI is the current owner of the Hingham Water System through its wholly-owned subsidiaries. Through the acquisition of Aquarion that closed on April 30, 2007, MUI acquired 100 percent of the Hingham Water System. I have used this transaction to estimate the amount actually invested by MUI to acquire the Hingham Water System on April 30, 2007. All additional investments in the Hingham Water System made by MUI subsequent to the transaction were also included as part of the actual cost component of the Purchase Price as detailed below. Because MUI acquired multiple systems in the same transaction, it is necessary to allocate the total purchase price paid to estimate the amount invested by MUI to acquire the Hingham Water System.

⁶¹ Bond data was compiled in the Rittenhouse Report [AQ-032105 at -116].

⁶² Bond data was compiled in the Rittenhouse Report [AQ-032105 at -116].

45. To estimate the actual equity invested by MUI to acquire the Hingham Service Area, I first determined the TEV of Aquarion implied by the 2007 transaction. MUI invested \$578.25 million in equity in the transaction.^{63,64} In addition, MUI assumed the outstanding debt of AWCMA, AWCCT, AWCNH, and Aquarion Capital.⁶⁵ The most recent financials available as of the date of the Stock Purchase Agreement were for the 12 months ending December 31, 2005.⁶⁶ Adding the net debt⁶⁷ outstanding as of December 31, 2005 to the actual equity investment gives the TEV of Aquarion implied by the transaction as shown below.

Figure 3: Aquarion Total Enterprise Value Buildup: 2007 Acquisition

Aquarion Total Enterprise Value Buildup: 2007 Acquisition	
Equity	\$578,250,000
Net Debt:	
AWCCT	\$185,693,402
AWCNH	\$9,948,529
Aquarion Capital	\$24,120,000
AWCMA	\$21,016,018
Total Net Debt	\$240,777,949
Total Enterprise Value	\$819,027,949

46. The TEV of Aquarion was then allocated to the four entities acquired: AWCMA, AWCCT, AWCNH, and Aquarion Capital.⁶⁸ The TEV was allocated on the basis of Earnings before Interest, Taxes, Depreciation, and Amortization (“EBITDA”). The ratio of TEV to EBITDA is a commonly used valuation metric, is heavily relied on by investment bankers, and is particularly appropriate

⁶³ [AQ-027537].

⁶⁴ Deposition of Troy Dixon, Vol. II, at p. 178-179 (May 7, 2014)

⁶⁵ [AQ-027451 at -27456].

⁶⁶ [AQ-027198 at -27208].

⁶⁷ Net debt is equal to the total outstanding debt less the cash balance.

⁶⁸ Homeowner Safety Valve Company was also acquired as part of the transaction, but is a small portion of Aquarion Company and has not been allocated any value. Ascribing value to Homeowner Safety Valve Company would reduce the allocation to the other companies, and would result in a reduced Purchase Price estimate.

when comparing companies with similar business models, growth prospects, and risk profiles.⁶⁹ As water companies, these entities are very similar in that they face little to no competition, are regulated by state regulatory agencies, and have prices set and approved through those regulatory agencies. The companies exhibit similar risk and growth characteristics, and would therefore be expected to trade at similar TEV to EBITDA multiples. Allocating TEV by EBITDA is therefore appropriate.

47. The most recent financials available as of the date of the Stock Purchase Agreement were for the 12 months ending December 31, 2005, so 2005 EBITDA was used to allocate TEV among the four companies acquired.⁷⁰
48. Financial data for AWCMA combines the Hingham Service Area and the Oxford/Millbury Service Area, so the AWCMA TEV needed to be allocated further. I allocated AWCMA TEV to the Hingham Service Area based on the percentage of AWCMA gross plant and equipment assets that are in the Hingham Service Area because EBITDA was not available by geography. Gross plant and equipment is an indication of the size of the water system, and is therefore an appropriate metric on which to allocate value in the absence of EBITDA.⁷¹ The EBITDA for each of the four companies acquired, the breakdown of AWCMA gross plant between the Hingham Service Area and the Oxford/Millbury Service Area, and the resulting TEV allocation to each entity are summarized in the following table.

⁶⁹ Damadoran, Aswath. 2002. *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset, 2nd Ed.* (New York, John Wiley & Sons, Inc.), p. 501-508.

⁷⁰ The agreement itself references 2005 financials. See [AQ-027198 at 7208-7210]

⁷¹ The percentage of AWCMA gross plant and equipment that is in the Hingham Service Area was one of three factors that Aquarion management incorporated into its allocation of AWCMA dividends to the Hingham Service Area.

Figure 4: Total Aquarion Enterprise Value Allocation: 2007 Acquisition

	EBITDA (2005)	EBITDA % (2005)	Gross Plant %, excl WTP (12/31/2005)	TEV allocation
AWCCT	\$75,591,146	88.1%		\$721,280,310
AWCNH	\$2,227,610	2.6%		\$21,255,548
Aquarion Capital	\$3,112,000	3.6%		\$29,694,276
AWCMA	\$4,904,474	5.7%		\$46,797,816
Hingham S.A.	N/A	N/A	54.3%	\$25,407,955
Oxford/Millbury S.A.	N/A	N/A	45.7%	\$21,389,861
<i>Totals</i>	\$85,835,230	100.0%		\$819,027,949

49. After allocating the TEV to the individual companies, I subtracted the company-specific net debt from the TEV to generate an estimate of the actual equity invested in each entity as part of the 2007 transaction. AWCMA debt was allocated to the Hingham Service Area and the Oxford/Millbury Service Area based on the percentage of AWCMA gross plant and equipment that is in the Hingham Service Area.⁷² A summary of the calculation of the equity investment in each entity is shown in the following table.

Figure 5: Aquarion Total Enterprise Value Allocation: 2007 Acquisition

	TEV allocation	Company- specific debt (2005)	Equity
AWCCT	\$721,280,310	\$185,693,402	\$535,586,908
AWCNH	\$21,255,548	\$9,948,529	\$11,307,019
Aquarion Capital	\$29,694,276	\$24,120,000	\$5,574,276
AWCMA	\$46,797,816	\$21,016,018	\$25,781,798
Hingham S.A.	\$25,407,955	\$11,410,234	\$13,997,721
Oxford/Millbury S.A.	\$21,389,861	\$9,605,784	\$11,784,077
<i>Totals</i>	\$819,027,949	\$240,777,949	\$578,250,000
Hingham Service Area + Aquarion Capital Equity			\$19,571,996

50. The total equity invested in the Hingham Water System by MUI in 2007 is the sum of the equity invested in the Hingham Service Area and the equity invested in Aquarion Capital. However, in

⁷² This is the same method that was used to allocate TEV across the two service areas within AWCMA.

addition to the amount invested in April 2007, MUI invested another \$3.1 million into AWCMA in December 2007 when it took a dividend out of Aquarion Capital, and invested that dividend into AWCMA.⁷³ I allocated \$1.65 million of this amount to the Hingham Water System based on gross plant. This combined equity investment by MUI (i.e., the April 2007 and December 2007 investments) in the Hingham Water System makes up the “actual cost” component of the Purchase Price calculation.

B. Step 2- Calculation of Interest on the Actual Equity Investment

51. The Statute specifies “interest...at a rate not exceeding ten per centum per annum.”⁷⁴ I have been directed by counsel to use ten percent in my calculation of the return component of the Purchase Price. This is a conservative assumption and represents the most favorable return allowed under the Statute. I understand that there may be some justification for the application of a rate lower than ten percent. The application of a rate of return less than ten percent would have the effect of reducing the concluded Purchase Prices derived from the approaches discussed in this report.
52. The interest, or rate of return, component was calculated for each year, and is equal to ten percent times the actual equity investment at the start of each year. The equity invested in the Hingham Water System after 2007 includes an allocation of the \$3.1 million equity investment in AWCMA that was made at the end of 2007. The returns for each individual year were summed to determine the total return due to the owners of the Hingham Water System under the Statute. This calculation is shown in Schedule 1.

⁷³ Deposition of Troy Dixon, Vol. II, at p. 146-147 (May 7, 2014); Dixon stated that he thought the \$3.1 million dividend out of Aquarion Capital and subsequent contribution to AWCMA occurred “at the very end of 2007.”

⁷⁴ Massachusetts Acts of 1879, Chapter 139, p. 492.

C. Step 3- Determine Dividends paid by the Hingham Water System

53. The dividends paid to the current owner were calculated by adding the Aquarion Capital dividends and an allocation of the AWCMA dividends paid between April 30, 2007 and December 31, 2013. Aquarion Capital dividend data was obtained from the Aquarion Capital audited financials. AWCMA dividends were provided in the AWCMA DPU Reports.⁷⁵
54. The allocation of AWCMA dividends is necessary because the Hingham Service Area was merged with other water systems in 1989. To allocate the AWCMA dividends, the gross plant and equipment in the Hingham Service Area was calculated as a percentage of the total gross plant and equipment in AWCMA (excluding Aquarion Capital) for each year from 2007-2013⁷⁶. This allocation factor was then multiplied by the total dividends paid each year by AWCMA to determine the annual dividends allocated to the Hingham Service Area. See Schedule 5 for Allocation details.

D. Step 4- Determine Current Debt Outstanding

55. The current debt outstanding was estimated as of December 31, 2013 by summing (1) the total Aquarion Capital debt and (2) an allocation of the total AWCMA debt. While debt was not used to finance the initial construction of the Hingham Water System, it would be appropriate to compensate the current owner for the outstanding debt associated with the assets that would be acquired by the Town of Hingham, since the current owner used debt to finance those assets.
56. Furthermore, Section 13 of the Statute states:

⁷⁵ The 2007 DPU Report and 2007 Audited Financials do not indicate when the 2007 dividend was paid. We have assumed that the dividend was paid after April 30, 2007. The amount of the 2007 dividend allocated to the Hingham Service Area is \$85,175.

⁷⁶ This gross plant percentage data for 1989-2011 was provided by Aquarion Management as part of the Willamette Report (Appendix B at p. 36-39). I was not provided with sufficient data to perform this calculation in 2012-2013, so I have assumed that the gross plant percentage in 2012-2013 was equal to 2011.

“In case the town of Hingham shall purchase the property, rights, privileges and franchises of the corporation established by this act, the said town shall exercise all the rights, powers and authority, and be subject to all the restrictions, duties and liabilities herein contained, in such manner, and by such officers, servants or agents as the town may direct, and the town shall be liable to pay all damages for land, water, or water rights taken for the purposes set forth in this act which shall not have been previously paid by said corporation.”⁷⁷

57. This section of the Statute supports adding outstanding debt (a liability) to the Purchase Price, as it contemplates the Town being “subject to all the restrictions, duties and liabilities.” Because it is my understanding that the debt will be paid off by the current owner rather than assumed by the Town, it is appropriate to compensate the current owner for that debt.
58. AWCMA debt was allocated to the Hingham Service Area using the same allocation factor discussed above. First, the gross plant and equipment in the Hingham Service Area was calculated as a percentage of the total gross plant and equipment in AWCMA for each year. This allocation factor was then multiplied by the total AWCMA debt outstanding to determine the debt allocated to the Hingham Service Area. See Schedule 5 for Allocation details.

E. Concluded Purchase Price

59. The Purchase Price is calculated as (1) the total equity investment made by the owner of the Hingham Water System, (2) plus a ten percent return each year on the equity investment made, (3) less dividends already paid to the owner of the Hingham Water System, (4) plus the retirement of all outstanding debt of the Hingham Water System.

⁷⁷ Massachusetts Acts of 1879, Chapter 139, p. 493.

Figure 6: Purchase Price Summary

Purchase Price Summary	Including WTP
April 2007 Investment	\$ 19,571,996
December 2007 Investment	\$ 1,650,269
+ 10% Interest	\$ 14,157,867
- Dividends	\$ (7,237,093)
+ Retirement of Debt (12/31/2013)	\$ 30,486,836
Total Purchase Price	\$ 58,629,875

60. This approach ensures that the current owner of the Hingham Water System recovers the actual equity investment and that the owner receives a ten percent return on the investment as specified under the Statute, taking into account the dividends already paid.

61. This analysis has been performed through the Calculation Date of December 31, 2013. The Purchase Price above can be recalculated for a date after December 31, 2013 by making the following adjustments:

- Add to the Purchase Price any equity contributions made to AWCMA or Aquarion Capital between December 31, 2013 and the new calculation date.⁷⁸
- Add to the Purchase Price the interest, or return, on the equity investment at 10 percent for the time period between December 31, 2013 and the new calculation date.⁷⁹
- Subtract from the Purchase Price any dividends paid by AWCMA or Aquarion Capital between December 31, 2013 and the new calculation date.⁸⁰
- Calculate outstanding debt as of the new calculation date, and replace the outstanding debt as of December 31, 2013 with the outstanding debt as of the new calculation date.⁸¹

⁷⁸ Any AWCMA contributions should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for the December 2007 contribution.

⁷⁹ The interest should accrue on the total of the April 2007 and December 2007 investments (and any additional investments made beyond 2013, if applicable). The interest component should be prorated for any partial year.

⁸⁰ Any AWCMA dividends should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for all AWCMA dividends from 1989 through 2013.

⁸¹ AWCMA debt should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year.

VI. Contributed Equity Purchase Price

62. I also calculated a purchase price based on the books and records of the Hingham Water System back to 1879 (the “Contributed Equity Purchase Price”). This approach takes into consideration the actual equity capital raised by the Hingham Water Company and invested into the Hingham Water System (“Contributed Equity”) by its various owners since 1879. The Contributed Equity Purchase Price bases the price paid to the current owner of the Hingham Water System on financing and operations that occurred, in large part, prior to their ownership. To the extent that previous owners earned a rate of return of less than ten percent on their investment, the shortfall would be aggregated into a payment to the current owner.

A. Overview of the Contributed Equity Purchase Price Methodology

63. The Contributed Equity Purchase Price is calculated as (1) the total equity contributed to the Hingham Water System by the owners since 1879, (2) plus the sum of the interest, or return, in each year, calculated as ten percent of the total Contributed Equity as of the start of each year, (3) less the sum of all dividends already paid to the owners of the water company since 1879, (4) plus the retirement of all outstanding debt of the Hingham Water System.

B. Step 1- Determine Contributed Equity for the Hingham Water System

64. The amount of equity contributed to the Hingham Water System by its owners since 1879 can be found in financial statements. The Contributed Equity can be calculated from the annual DPU reports as the sum of the Total Capital Stock, Premium on Capital Stock, and Surplus Invested in Plant accounts.^{82,83} The Contributed Equity can also be calculated from the company’s audited financials as the sum of the Common Stock and Paid-In Capital accounts.⁸⁴

⁸² During 2002, there was a transfer of \$1,547,735 from the Profit and Loss Balance Account into the Premium on Capital Stock Account. This transfer was reversed in 2003. *See* [AQ-003648 at -3658] and [AQ-003758 at -3768]. These transactions do not reflect additional capital that was paid into the company. Therefore, I have excluded the temporary increase in the Premium on Stock Account from the calculation of Contributed Equity.

65. From 1989-2013, the Hingham Service Area was merged with the Oxford/Millbury Service Area, so the Contributed Equity of AWCMA was allocated to the Hingham Service Area as follows. First, the gross plant and equipment in the Hingham Service Area was calculated as a percentage of the total gross plant and equipment in AWCMA (excluding Aquarion Capital assets) for each year from 1989-2013⁸⁵. This allocation factor was then multiplied by the year-over-year change in Contributed Equity to determine the change in Contributed Equity allocated to the Hingham Service Area. See Schedule 5 for Allocation details.

C. Step 2- Calculation of Interest on Contributed Equity

66. The interest, or rate of return, component of the Contributed Equity Purchase Price calculation is determined annually by computing ten percent of the total Contributed Equity as of the start of each year. The interest for each individual year is summed to determine the total return due to the current owner of the Hingham Water System under the Statute. This calculation is shown in Schedule 2.

D. Step 3- Determine Dividends paid by the Hingham Water System

67. Aquarion Capital dividend data was obtained from the Aquarion Capital audited financials.⁸⁶
68. Hingham Service Area dividends were compiled from several different sources, including DPU Reports and the books and records of the Hingham Water Company.⁸⁷ From 1989-2013, the

⁸³ The earliest DPU Report we were provided was for 1929. Prior to 1929, the books and records of the Hingham Water Company provided this data. The Rittenhouse Report at [AQ-032105 to -126] was prepared for the Town of Hingham in 1935 and contains consolidated financial information through 1934. For the period from 1928-1934, we cross checked the data in the Rittenhouse Report with the data from the DPU Reports to ensure consistency between data sources. The data compiled in the Rittenhouse Report was consistent with the DPU Reports. We also compared the data in the Rittenhouse Report with data from the Hingham Water Company's books and records for the period 1879-1928 to ensure consistency.

⁸⁴ 1998-1999 Aquarion Water Capital audited financials were not provided. However, there was no difference between the 1997 and 2000 balances in the Common Stock and Paid-In Capital accounts. Therefore, I have assumed that there were no changes to these account balances in 1998 and 1999.

⁸⁵ This gross plant percentage data for 1989-2011 was provided by Aquarion Management as part of the Willamette Report (Appendix B at p. 36-39). I was not provided with sufficient data to perform this calculation in 2012-2013, so I have assumed that the gross plant percentage in 2012-2013 was equal to 2011.

⁸⁶ 1998-1999 Aquarion Water Capital audited financials were not provided, so I relied for these two years on the dividend data provided by Aquarion Management in the Willamette Report (Appendix B at p. 36-39).

Hingham Service Area was merged with the Oxford/Millbury Service Area, so the AWCMA dividends were allocated to the Hingham Service Area as follows. First, the gross plant and equipment in the Hingham Service Area was calculated as a percentage of the total gross plant and equipment in AWCMA (excluding Aquarion Capital assets) for each year from 1989-2013.⁸⁸ This allocation factor was then multiplied by the total dividends paid by AWCMA in each year to determine the annual dividends allocated to the Hingham Service Area. See Schedule 5 for Allocation details.⁸⁹

E. Step 4- Determine Current Debt Outstanding

69. The current debt outstanding was estimated as of December 31, 2013 by summing (1) the total Water Treatment Plant debt and (2) an allocation of the total AWCMA debt.
70. AWCMA debt was allocated to the Hingham Service Area using the same allocation factor discussed above. First, the gross plant and equipment in the Hingham Service Area was calculated

⁸⁷ The earliest DPU Report we were provided was for 1929. Prior to 1929, the books and records of the Hingham Water Company provided dividend data. The Rittenhouse Report compiled dividend data through 1934. For the period from 1928-1934, we cross checked the data in the Rittenhouse Report with the data from the DPU Reports to ensure consistency between data sources. The data compiled in the Rittenhouse Report was consistent with the DPU Reports. We also compared the data in the Rittenhouse Report with data from the Hingham Water Company's books and records for the period 1879-1928 to ensure consistency.

⁸⁸ This gross plant percentage data for 1989-2011 was provided by Aquarion Management as part of the Willamette Report (Appendix B at p. 36-39). I was not provided with sufficient data to perform this calculation in 2012-2013, so I have assumed that the gross plant percentage in 2012-2013 was equal to 2011.

⁸⁹ There are several key differences between the dividends used in this analysis and the dividends provided by Aquarion as part of the Willamette Report (Appendix B at p. 36-39). First, the Rittenhouse Report presents data through 1921 using a fiscal year ending June 30. It appears that Aquarion provided data using a fiscal year ending December 31. Second, the dividends provided by Aquarion for 1881-1882 are \$400 higher than the Rittenhouse report, taking into account the differences in fiscal year. Third, Aquarion was unable to locate dividend information for the years 1917-1927 and 1981-1984. The Rittenhouse report provided dividend data for 1917-1927, and I was provided with DPU reports for 1981-1984. Fourth, the 1971 dividend provided by Aquarion was inconsistent with the 1971 DPU Report, so I relied on the dividend shown in the DPU Report. Fifth, the 2002 dividend provided by Aquarion was based on partial year financial statements. Dividends paid over the full year were higher than the dividends provided by Aquarion in the Willamette Report. Sixth, many of the dividends provided by Aquarion over the period from 1996-2008 relied on rounded dividend figures provided in the audited financials, which are slightly different than the unrounded figures reported in the DPU reports. Finally, I used a different dividend allocation methodology than Aquarion for the time period from 1989-2013. Our selected dividend allocation methodology has the effect of reducing the dividend allocation to the Hingham Water System, increasing the resulting Purchase Price estimate.

as a percentage of the total gross plant and equipment in AWCMA for each year. This allocation factor was then multiplied by the total AWCMA debt outstanding to determine the debt allocated to the Hingham Service Area. See Schedule 5 for Allocation details.

F. Concluded Contributed Equity Purchase Price

71. The Contributed Equity Purchase Price is calculated as (1) the total equity contributed by the owners of the Hingham Water System since 1879, (2) plus the sum of the interest, or return, in each year, calculated as ten percent of the total Contributed Equity at the start of each year, (3) less the sum of all dividends already paid to the owners of the Hingham Water System since 1879, (4) plus the retirement of all outstanding debt of the Hingham Water System.

Figure 7: Contributed Equity Purchase Price Summary

Contributed Equity Purchase Price Summary	Including WTP
Total Contributed Equity	\$ 10,750,928
plus Interest	\$ 26,343,284
Less Dividends	\$ (15,853,997)
plus Retirement of Outstanding Debt	\$ 30,486,836
Contributed Equity Purchase Price	\$ 51,727,051

72. This approach ensures that all of the money invested into the Hingham Water System by all of its owners since its incorporation in 1879 is recovered, that annual interest of ten percent on the actual investment into the Hingham Water System has been earned, and takes into account the dividends already paid to the shareholders of the Hingham Water System.
73. This analysis has been performed through the Calculation Date of December 31, 2013. The Contributed Equity Purchase Price above can be recalculated for a date after December 31, 2013 by making the following adjustments:

- Add to the Contributed Equity Purchase Price any equity contributions made to AWCMA or Aquarion Capital between December 31, 2013 and the new calculation date.⁹⁰
- Add to the Contributed Equity Purchase Price interest on the cumulative Contributed Equity at 10 percent for the time period between December 31, 2013 and the new calculation date.⁹¹
- Subtract from the Contributed Equity Purchase Price any dividends paid by AWCMA or Aquarion Capital between December 31, 2013 and the new calculation date.⁹²
- Calculate outstanding debt as of the new calculation date, and replace the outstanding debt as of December 31, 2013 with the outstanding debt as of the new calculation date.⁹³

VII. Critique of the Methodology Used in the Willamette Report

74. I was provided with the Willamette Management Associates Formula Purchase Price Analysis of the Hingham Water System, dated June 29, 2012 (the “Willamette Report”). I understand that it has been offered as an indication of the purchase price calculation under the Statute. The Willamette Report concludes on a purchase price including the Water Treatment Plant (the “Willamette Purchase Price”) of \$184.5 million for the Hingham Water System and would result in a 7.3x cash return to the current owner.⁹⁴ As a reasonableness test of the Willamette Purchase Price, I estimated what annual return in the Statute (i.e., other than 10 percent) would generate a Purchase Price of over \$180 million, using my Purchase Price methodology outlined in Section V above. To generate a Purchase Price of over \$180 million using the methodology in Section V, the return figure would have to be over 98 percent per year from April 30, 2007 through December 31, 2013. That is, to generate a purchase price of \$180 million, the legislators in 1879 would have had to have

⁹⁰ Any AWCMA contributions should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for the 1990, 1991, 1998, and 2007 contributions.

⁹¹ The interest should accrue on the total Contributed Equity as of the start of each year. The interest component should be prorated for any partial year.

⁹² Any AWCMA dividends should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for all AWCMA dividends from 1989 through 2013.

⁹³ AWCMA debt should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year.

⁹⁴ This cash return is based on the estimated equity invested by MUI in the Hingham Water System described in Section V.

wanted the current owner to receive an annual return of over 98 percent under the Statute. This is unreasonable and not consistent with any reasonable investment returns of which I am aware.

75. The Willamette Purchase Price is based on gross plant and equipment, and calculates a return on annual gross plant and equipment going back to 1879. This approach results in a purchase price paid to the current owner of the Hingham Water System for assets that were put in place and for operations that occurred, in large part, prior to current ownership. As discussed above, to the extent that previous owners earned a rate of return of less than ten percent on their investment, the shortfall would be aggregated into a payment to the current owner.
76. The Willamette Purchase Price is unreasonable for a number of reasons. The key areas of the Willamette Report that I address are: (1) the use of gross plant vs. net plant (i.e., the treatment of depreciation), (2) the importance of consistency in terms of the calculation of the interest, or rate of return, component (i.e., return on assets vs. return on debt vs. return on equity), and (3) the addition of costs associated with the assembled workforce, the customer information database, the property maintenance database, and the water testing records database (the “Willamette Intangible Assets”) to the Purchase Price.

A. Net Plant vs. Gross Plant

77. Any approach that utilizes gross plant as the basis for the purchase price, either by computing returns on the annual balance of gross plant, or by including the ending balance of gross plant in the purchase price, will have the effect of overstating the purchase price.
78. The Statute states that the Town of Hingham has the right to purchase the corporate property of the Hingham Water Company at “actual cost.”⁹⁵ Willamette interpreted this to mean that the purchase price should include the original, undepreciated cost of all plant in service.⁹⁶ However, this

⁹⁵ Massachusetts Acts of 1879, Chapter 139, p. 492.

⁹⁶ Willamette Report at p. 18.

approach results in the double-counting of any plant assets that have already been depreciated by allowing recovery both through (1) the depreciation expense incorporated into the rates charged to ratepayers, and (2) the Willamette Purchase Price paid by the Town under the Statute.

79. Depreciation expense is included in the determination of water rates by the Mass DPU. In its rate case decisions, the Mass DPU states that “Depreciation expense allows a company to recover its capital investments in a timely and equitable fashion over the service lives of the investments.”⁹⁷ Aquarion acknowledges this, stating “The Department has recognized that depreciation expense provides funds necessary for plant replacement but also exists so that a utility can recover the capital it has invested in plant and equipment necessary to provide services to customers.”⁹⁸ It is clear from these statements that the cost of the plant of the Hingham Water Company is recovered by the company, over time, through the depreciation component of the rates charged to the ratepayers.
80. A review of financial records indicates that in fact the company has been able to recover all of its depreciation despite arguments to the contrary.⁹⁹ Cumulative net income (i.e., income in excess of expenses) of the Hingham Water Company through its merger with other water systems in 1989 was approximately \$4.8 million.¹⁰⁰ The cumulative net income of AWCMA since the merger in 1989 was approximately \$15.6 million. The cumulative net income of Aquarion Capital since its construction in 1995 was approximately \$5.7 million.¹⁰¹ The fact that the Hingham Water System

⁹⁷ D.P.U. 11-43 Order (March 30, 2012) at p. 199; D.P.U. 08-27 Order (March 31, 2009) at p. 110.

⁹⁸ D.P.U. 08-27 Initial Brief of Aquarion Water Company of Massachusetts, Inc. (January 21, 2009) at p. 22.

⁹⁹ For example, Troy Dixon testified that depreciation expense is not entirely paid by the customers through the depreciation expense in the cost of service component of the rates. Mr. Dixon states that the DPU uses historical information to set rates, and that any new depreciation after a rate decision is not incorporated into rates until the next case. Deposition of Troy Dixon, Vol. I, at p. 83-84 (May 6, 2014).

¹⁰⁰ Data was compiled from DPU Reports for the time period from 1929-1988. Data prior to 1928 was provided by the Rittenhouse Report [AQ-032105 at -118].

¹⁰¹ This excludes the net income in 1998 and 1999, because financials for these two years were not provided.

has generated positive net income indicates that they have earned income in excess of all expenses, including approximately \$30.4 million in depreciation since 1879.¹⁰²

81. An example of the double-recovery contained in the Willamette Report may be useful. Consider a specific asset that is near the end of its useful life. This asset would be nearly fully depreciated, and as a result, nearly the entire cost of the asset would have already been recovered by the company through the depreciation expense incorporated into the rates charged to the ratepayers.¹⁰³ Including the original cost of this asset in the purchase price under the Statute would provide compensation for a cost that has already been recovered.
82. Similar logic can be applied to the calculation of the return component of the purchase price. For an asset that is close to fully depreciated, the company has recovered nearly all of the original cost of the asset. Once the company's investment has been recovered through the depreciation component of the rates charged to the ratepayers, the company should no longer be entitled to earn a return on that investment.¹⁰⁴ By calculating the return on net plant, a return is only generated on plant whose cost has not already been recovered.
83. The approach applied in the Willamette Report is double counting in two different ways. First, by using gross plant as the "actual cost" component of the Willamette Purchase Price, the company would be allowed to recover through the Willamette Purchase Price amounts already recovered through the depreciation expense in the rates. Second, by calculating a return on gross plant, the company continues to accrue returns on investments that have already been recovered.

¹⁰² Of this \$30 million of depreciation expense, Aquarion Capital accounts for approximately \$10.7 million, the Hingham Water Company (from 1879-1988) accounts for approximately \$1.5 million, and AWCMA (from 1989-2013) accounts for approximately \$18.2 million. Data compiled from the DPU Reports and the Rittenhouse Report.

¹⁰³ In fact, there may be assets already fully depreciated that appear in gross plant.

¹⁰⁴ The DPU, for example, follows this approach by reducing the rate base by depreciation.

B. Calculation of the Interest Component (Debt vs. Equity)

84. The Statute specifies that dividends paid by the Hingham Water System to its shareholders should be subtracted from the actual cost and return components of the purchase price calculation. The dividend component reflects the return that has already been paid to the shareholders of the company. If the Court's interpretation of the Statute is that the 10 percent interest, or rate of return, component should be calculated on assets (i.e., gross plant or net plant), subtracting only dividends is insufficient.
85. For the first few years of Hingham Water System's existence, the entire system was financed with equity. Starting in 1883, the assets of the Hingham Water System were financed using a combination of both debt and equity, with both debt holders and equity shareholders sharing in the returns generated by those assets. The fact that the Statute specifies the deduction of only dividends strongly suggests that the 10 percent return portion of the Statute is referring to a return on equity. If the return component is calculated based on assets (which are financed using a combination of debt and equity) and only dividends (the return to equity owners) are deducted, the resulting price is overstated.
86. In its report, Willamette adjusts gross plant to account for contributions in aid of construction ("CIAC") and customer advances. This is reasonable, because CIAC and customer advances represent contributions by parties other than the owners of the company. These amounts were not financed by contributions made by the shareholders of the company. Similarly, debt allows a company to support a larger asset base than would be possible based only on the investment made by the shareholders. Because the shareholders did not invest this capital, there is no reason to expect that shareholders would earn a return on that capital. They should not be entitled to earn a return on capital they did not invest.

C. Treatment of the Willamette Intangible Assets

87. The Willamette Intangible Assets should not be added to the Willamette Purchase Price. To the extent that the historical costs associated with the Willamette Intangible Assets were incurred as part of normal operations, the costs would have already been recovered through the rates. For example, the “New Customer Connection Data” that is part of the customer information database is calculated using the estimated labor cost associated with each new customer connection.¹⁰⁵ Labor costs are expenses that are recovered through the rates charged to ratepayers. By including labor costs in the Willamette Purchase Price through its treatment of the Willamette Intangible Assets, the Willamette Report is overstating the purchase price.

VIII. Net Plant Purchase Price

88. Based on my review of the Willamette Report, I have prepared a purchase price calculation that corrects the methodology used by Willamette based on the issues identified above (the “Net Plant Purchase Price”).

89. The Willamette Report used as “actual cost” the gross plant and equipment in the Hingham Water System. Using this approach would result in a windfall to the current owner. I have instead used net plant and equipment as the starting point of the calculation. This adjustment accounts for the cost of the plant and equipment that has already been recovered through the depreciation expense built into the rates charged to the ratepayers.

90. The Willamette Report computes the interest, or rate of return, component of the Willamette Purchase Price using the annual balance of gross plant going back to 1879. This also results in a windfall to the current owner. While I have also computed interest going back to 1879, I have instead calculated the interest, or rate of return, component on the equity contributed to the Hingham Water System. This adjustment reflects the fact that returns to debt holders have already

¹⁰⁵ Willamette Report at p. 10-11.

been accounted for through the payment of interest as specified in the bond and debt agreements.

Computing the interest, or rate of return, component of the Net Plant Purchase Price based only on Contributed Equity (i.e., payments made into the company by equity investors) is consistent with the fact that only dividends (payments made to equity investors by the company) are included as a deduction to the purchase price under the Statute.

91. The Willamette Report deducts dividends paid by the Hingham Water System. My calculation is consistent with this approach.
92. Finally, The Willamette Report includes costs associated with the Willamette Intangible Assets. I have excluded these costs from the Net Plant Purchase Price calculation for the reasons described above.

A. Overview of the Net Plant Purchase Price Methodology

93. The Net Plant Purchase Price is calculated as (1) the total net plant and equipment in the Hingham Water System as of December 31, 2013, (2) plus the sum of the interest, or return, in each year going back to 1879, calculated as ten percent of the total Contributed Equity at the start of each year, (3) less the sum of all dividends already paid by the Hingham Water System since 1879.

B. Step 1- Determine the Net Plant in the Hingham Water System

94. The net plant and equipment in the Hingham Water System is based on the companies' financial records, and is calculated as the gross plant and equipment assets less accumulated depreciation.^{106,107} I obtained the December 31, 2013 Aquarion Capital net plant balance from the

¹⁰⁶ The DPU reports refer to accumulated depreciation as Depreciation Reserve. See Deposition of Troy Dixon, Vol. I, at p. 81 (May 6, 2014)

¹⁰⁷ I have included the Plant Investment, General Equipment, and Unfinished Construction accounts from the DPU reports in our calculation of gross plant. The total amount of unfinished construction in AWCMA as of December 31, 2013 is \$535,889. This was allocated to the Hingham Service Area based on the percentage of AWCMA gross plant in the Hingham service area, resulting in an allocation of \$299,451. The balance of unfinished construction in Aquarion Capital as of December 31, 2013 is zero.

2013 Aquarion Capital audited financials. AWCMA net plant was obtained from the 2013 AWCMA DPU Report. In 1989, the Hingham Service Area merged with the Oxford/Millbury Service Area, so the 2013 AWCMA net plant was allocated to the Hingham Service Area as follows. First, the gross plant and equipment in the Hingham Service Area was calculated as a percentage of the total gross plant and equipment in AWCMA (excluding Aquarion Capital assets).¹⁰⁸ This allocation factor was then multiplied by the 2013 AWCMA net plant balance to determine the net plant allocated to the Hingham Service Area.¹⁰⁹ See Schedule 5 for Allocation details.

95. Net Plant was adjusted for CIAC and customer advances.¹¹⁰ The Company may receive advances to fund the extension of service into new areas. These advances are refundable for limited periods of time as new customers begin to receive service. Advances which are no longer refundable are reclassified to CIAC.¹¹¹ Property financed through CIAC does not require any direct outlay by the Company,¹¹² and utility plant funded by advances and CIAC is excluded from the rate base.¹¹³

¹⁰⁸ This gross plant percentage data for 1989-2011 was provided by Aquarion Management as part of the Willamette Report (Appendix B at p. 36-39). I was not provided with sufficient data to perform this calculation in 2012-2013, so I have assumed that the gross plant percentage in 2012-2013 was equal to 2011.

¹⁰⁹ The financials of the Hingham Water Company were merged with the Oxford/Millbury Service Area in 1989. I was provided with financials as of December 31, 1988 for both the Hingham Water Company and the combined entity. Based on a review of this gross plant and depreciation data, it is clear that the assets in the Oxford/Millbury Service Area were newer (less depreciated) than the assets in the Hingham Water Company. Therefore, by allocating the depreciation reserve proportionately based on the percentage of gross plant in the Hingham Water Company, I have likely allocated less depreciation than is appropriate to the Hingham Water Company. Under-allocating depreciation to the Hingham Service Area has the effect of overstating the net plant in Hingham, and would overstate the estimated Purchase Price.

¹¹⁰ The CIAC and customer advances data provided by Aquarion management in the Willamette Report was increased for known contribution activity in the Hingham Service Area for many years, reducing the need for allocation of AWCMA data. Therefore, we have used the data as reported by Aquarion management in the Willamette Report (Appendix B at p. 36-39).

¹¹¹ AWCMA 2012 Audited Financials [AQ-005277 at -5288].

¹¹² D.P.U. 11-43 Order (March 30, 2012) at p. 21.

¹¹³ AWCMA 2012 Audited Financials [AQ-005277 at -5288].

Adjusting net plant for CIAC and advances to generate the “actual cost” of the Hingham Water System is appropriate.¹¹⁴

C. Step 2- Calculation of Interest

96. The interest, or rate of return, component of the Net Plant Purchase Price calculation is determined annually by computing ten percent of the total Contributed Equity as of the start of each year. The interest for each individual year is summed to determine the total return due to the owner of the Hingham Water System under the Statute. This calculation is shown in Schedule 3.
97. The amount of equity contributed to the Hingham Water System by its owners since 1879 can be found on financial statements. The Contributed Equity can be calculated from the annual DPU reports as the sum of the Total Capital Stock, Premium on Capital Stock, and Surplus Invested in Plant accounts.^{115,116} The Contributed Equity can also be calculated from the company’s audited financials as the sum of the Common Stock and Paid in Capital accounts.¹¹⁷
98. From 1989-2013, the Hingham Service Area was merged with the Oxford/Millbury Service Area, so the Contributed Equity of AWCMA was allocated to the Hingham Service Area as follows. First, the gross plant and equipment in the Hingham Service Area was calculated as a percentage of the

¹¹⁴ The notes to the 2013 audited financials state that “amortization on contributed facilities is charged to CIAC,” implying that CIAC is a net figure. Therefore, subtracting CIAC and customer advances from Net Plant is appropriate.

¹¹⁵ During 2002, there was a transfer of \$1,547,735 from the Profit and Loss Balance Account into the Premium on Capital Stock Account. This transfer was reversed in 2003. *See* [AQ-003648 at -3658] and [AQ-003758 at -3768]. These transactions do not reflect additional capital that was paid into the company. Therefore, I have excluded the temporary increase in the Premium on Stock Account from the calculation of Contributed Equity.

¹¹⁶ The earliest DPU Report we were provided was for 1929. Prior to 1929, the books and records of the Hingham Water Company provided this data. The Rittenhouse Report at [AQ-032105 to -126] was prepared for the Town of Hingham in 1935 and contains consolidated financial information through 1934. For the period from 1928-1934, we cross checked the data in the Rittenhouse Report with the data from the DPU Reports to ensure consistency between data sources. The data compiled in the Rittenhouse Report was consistent with the DPU Reports. We also compared the data in the Rittenhouse Report with data from the Hingham Water Company’s books and records for the period 1879-1928 to ensure consistency.

¹¹⁷ 1998-1999 Aquarion Water Capital audited financials were not provided. However, there was no difference between the 1997 and 2000 balances in the Common Stock and Paid-In Capital accounts. Therefore, I have assumed that there were no changes to these account balances in 1998 and 1999.

total gross plant and equipment in AWCMA (excluding Aquarion Capital assets) for each year from 1989-2013.¹¹⁸ This allocation factor was then multiplied by the year-over-year change in Contributed Equity to determine the change in Contributed Equity allocated to the Hingham Service Area. See Schedule 5 for Allocation details.

D. Step 3- Determine Dividends paid by the Hingham Water Company

99. Aquarion Capital dividend data was obtained from Aquarion Capital audited financials.¹¹⁹
100. Hingham Service Area dividends were compiled from several different sources, including DPU Reports and the books and records of the Hingham Water Company.¹²⁰ From 1989-2013, the Hingham Service Area was merged with the Oxford/Millbury Service Area, so the AWCMA dividends were allocated to the Hingham Service Area as follows. First, the gross plant and equipment in the Hingham Service Area was calculated as a percentage of the total gross plant and equipment in AWCMA (excluding Aquarion Capital assets) for each year from 1989-2013.¹²¹ This allocation factor was then multiplied by the total dividends paid by AWCMA in each year to determine the annual dividends allocated to the Hingham Service Area. See Schedule 5 for Allocation details.

¹¹⁸ This gross plant percentage data for 1989-2011 was provided by Aquarion Management as part of the Willamette Report. I was not provided with sufficient data to perform this calculation in 2012-2013, so I have assumed that the gross plant percentage in 2012-2013 was equal to 2011.

¹¹⁹ 1998-1999 Aquarion Water Capital audited financials were not provided, so I relied for these two years on the dividend data provided by Aquarion Management in the Willamette Report (Appendix B at p. 36-39).

¹²⁰ The earliest DPU Report we were provided was for 1929. Prior to 1929, the books and records of the Hingham Water Company provided dividend data. The Rittenhouse Report compiled dividend data through 1934. For the period from 1928-1934, we cross checked the data in the Rittenhouse Report with the data from the DPU Reports to ensure consistency between data sources. The data compiled in the Rittenhouse Report was consistent with the DPU Reports. We also compared the data in the Rittenhouse Report with data from the Hingham Water Company's books and records for the period 1879-1928 to ensure consistency.

¹²¹ This gross plant percentage data for 1989-2011 was provided by Aquarion Management as part of the Willamette Report (Appendix B at p. 36-39). I was not provided with sufficient data to perform this calculation in 2012-2013, so I have assumed that the gross plant percentage in 2012-2013 was equal to 2011.

E. Concluded Net Plant Purchase Price

101. The Net Plant Purchase Price is calculated as (1) the total net plant and equipment in the Hingham Water System as of December 31, 2013, (2) plus the sum of the interest in each year going back to 1879, calculated as ten percent of the total Contributed Equity at the start of each year, (3) less the sum of all dividends already paid by the Hingham Water System since 1879.

Figure 8: Net Plant Purchase Price Summary

Net Plant Purchase Price Summary		Including WTP
Ending Net Plant	\$	47,931,454
plus Interest	\$	26,343,284
Less Dividends	\$	(15,853,997)
Net Plant Purchase Price	\$	58,420,742

102. This approach ensures the recovery of the cost of all of the plant and equipment assets of the Hingham Water System, ensures that a ten percent return on the equity contributed to the Hingham Water System has been earned, and takes into account the dividends already paid by the Hingham Water System.

103. This analysis has been performed through the Calculation Date of December 31, 2013. The Net Plant Purchase Price above can be recalculated for a date after December 31, 2013 by making the following adjustments:

- Identify AWCMA net plant from the balance sheet, or similar source, as of the new calculation date. Allocate net plant to the Hingham Service Area based on gross plant. Add to this the Aquarion Capital net plant as of the new calculation date. Replace the net plant as of December 31, 2013 with the allocated net plant from AWCMA and the net plant from Aquarion Capital as of the new calculation date.
- Identify any equity contributions made to AWCMA or Aquarion Capital between December 31, 2013 and the new calculation date.¹²²

¹²² Any AWCMA contributions should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for the 1990, 1991, 1998, and 2007 contributions.

- Add to the Net Plant Purchase Price the interest, or return, on the cumulative Contributed Equity at 10 percent for the time period between December 31, 2013 and the new calculation date.¹²³
- Subtract from the Net Plant Purchase Price any dividends paid by AWCMA or Aquarion Capital between December 31, 2013 and the new calculation date.¹²⁴

IX. Purchase Price Conclusions Excluding the Water Treatment Plant

104. I understand that the purchase of the Water Treatment Plant that services the Hingham Water System is in dispute. While the Water Treatment Plant was originally owned by the predecessor to AWCMA,¹²⁵ it is not currently owned by AWCMA. Aquarion Capital is a separate, wholly-owned subsidiary of Aquarion Company. I understand that the current water treatment plant sale-leaseback agreement that is currently in place with AWCMA was structured in order to have the lease classified as an operating lease, and to remove the Water Treatment Plant from the predecessor to AWCMA's balance sheet.¹²⁶ Mr. Firlotte described Aquarion Capital as "simply a financing vehicle to hold the filtration facility in Massachusetts."¹²⁷ In terms of its operations, the Water Treatment Plant is a part of the Hingham Water System.¹²⁸ This operational reality is not changed by the financial decision to hold the Water Treatment Plant within Aquarion Capital. However, due to the dispute regarding the inclusion of the Water Treatment Plant in the purchase price under the Statute,

¹²³ The interest should accrue on the total Contributed Equity as of the start of each year, including any additional equity contributed beyond December 31, 2013. The interest component should be prorated for any partial year.

¹²⁴ Any AWCMA dividends should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for all AWCMA dividends from 1989 through 2013.

¹²⁵ Initial construction of the Water Treatment Plant was undertaken by the predecessor to AWCMA. Only after construction began was the decision made to separate the Water Treatment Plant from the predecessor to AWCMA through the use of the sale-leaseback agreement. [AQ-023759 at -3765]

¹²⁶ Exhibit C to the Facility Lease Agreement dated July 1, 1995 [AQ-025910 at -5989].

¹²⁷ State of New Hampshire Public Utilities Commission: DW 06-094, Testimony of Charles V. Firlotte at p. 56-57 (September 20, 2006).

¹²⁸ In a 1996 rate case (D.P.U. 95-118), Oxford argued that "the overall [Water Treatment Plant] project is intended to serve only [the Hingham Service Area] and thus is unrelated to the provision of water service in [the Oxford/Millbury Service Area]." In the same rate case, AWCMA stated that "the [Water Treatment Plant], in conjunction with the related system improvements...will increase [the Hingham Service Area's] reliable peak day capacity," with no mention of the benefits to the Oxford/Millbury Service Area. See D.P.U. 95-118 Order dated May 31, 1996 at p. 32 and p. 8, respectively.

I have performed purchase price calculations both including and excluding the Water Treatment Plant.¹²⁹

105. I have performed the same three purchase price calculations as discussed above, but have excluded the Water Treatment Plant.

A. Purchase Price: Actual Equity Invested by Current Owner

106. The Water Treatment Plant was excluded from the Purchase Price calculation by (1) removing the estimate of the total equity invested in Aquarion Capital in the 2007 transaction from the actual cost component of the Purchase Price, (2) recalculating the interest, or rate of return, component based only on the equity investment in the Hingham Service Area, (3) removing the dividends paid by Aquarion Capital, and (4) eliminating Aquarion Capital debt as of December 31, 2013.

107. The Purchase Price excluding the Water Treatment Plant is \$34,717,871 and is shown in Schedule 1.

108. This analysis has been performed through the Calculation Date of December 31, 2013. The Purchase Price excluding the Water Treatment Plant can be recalculated for a date after December 31, 2013 by making the following adjustments:

- Add to the Purchase Price any equity contributions made to AWCMA between December 31, 2013 and the new calculation date.¹³⁰
- Add to the Purchase Price the interest, or return, on the equity investment at 10 percent for the time period between December 31, 2013 and the new calculation date.¹³¹
- Subtract from the Purchase Price any dividends paid by AWCMA between December 31, 2013 and the new calculation date.¹³²

¹²⁹ If the Water Treatment Plant is not purchased by the Town, the Town has the right to step into the Water Treatment Plant Lease. See [AQ-025849 at -871]

¹³⁰ Any AWCMA contributions should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for the December 2007 contribution.

¹³¹ The interest should accrue on the total of the April 2007 and December 2007 investments (and any additional investments made beyond 2013, if applicable). The interest component should be prorated for any partial year.

¹³² Any AWCMA dividends should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for all AWCMA dividends from 1989 through 2013.

- Calculate outstanding debt as of the new calculation date, and replace the outstanding debt as of December 31, 2013 with the outstanding debt as of the new calculation date.¹³³

B. Contributed Equity Purchase Price

109. The Water Treatment Plant was excluded from the Contributed Equity Purchase Price calculation by (1) removing the Contributed Equity of Aquarion Capital from the actual cost component of the Contributed Equity Purchase Price, (2) recalculating the interest, or rate of return, component based only on the equity contributed to the Hingham Service Area, (3) removing the dividends paid by Aquarion Capital, and (4) eliminating Aquarion Capital debt as of December 31, 2013.

110. The Contributed Equity Purchase Price excluding the Water Treatment Plant is \$20,711,451 and is shown in Schedule 2.

111. This analysis has been performed through the Calculation Date of December 31, 2013. The Contributed Equity Purchase Price excluding the Water Treatment Plant can be recalculated for a date after December 31, 2013 by making the following adjustments:

- Add to the Contributed Equity Purchase Price any equity contributions made to AWCMA between December 31, 2013 and the new calculation date.¹³⁴
- Add to the Contributed Equity Purchase Price the interest, or return, on the cumulative Contributed Equity to AWCMA at 10 percent for the time period between December 31, 2013 and the new calculation date.¹³⁵
- Subtract from the Contributed Equity Purchase Price any dividends paid by AWCMA between December 31, 2013 and the new calculation date.¹³⁶
- Calculate outstanding debt for AWCMA as of the new calculation date, and replace the outstanding debt as of December 31, 2013 with the outstanding debt as of the new calculation date.¹³⁷

¹³³ AWCMA debt should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year.

¹³⁴ Any AWCMA contributions should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for the 1990, 1991, 1998, and 2007 contributions.

¹³⁵ The interest should accrue on the total Contributed Equity as of the start of each year. The interest component should be prorated for any partial year.

¹³⁶ Any AWCMA dividends should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for all AWCMA dividends from 1989 through 2013.

C. Net Plant Purchase Price

112. The Water Treatment Plant was excluded from the Net Plant Purchase Price calculation by (1) removing Aquarion Capital net plant from the actual cost component of the Net Plant Purchase Price, (2) recalculating the interest, or rate of return, component based only on the equity contributed to the Hingham Service Area, and (3) removing the dividends paid by Aquarion Capital.
113. The Net Plant Purchase Price excluding the Water Treatment Plant¹³⁸ is \$27,181,142 and is shown in Schedule 3.
114. This analysis has been performed through the Calculation Date of December 31, 2013. The Net Plant Purchase Price excluding the Water Treatment Plant can be recalculated for a date after December 31, 2013 by making the following adjustments:
- Identify AWCMA net plant from the balance sheet, or similar source, as of the new calculation date. Allocate net plant to the Hingham Service Area based on gross plant. Replace the net plant as of December 31, 2013 with the allocated net plant from AWCMA as of the new calculation date.
 - Identify any equity contributions made to AWCMA between December 31, 2013 and the new calculation date.¹³⁹
 - Add to the Net Plant Purchase Price the interest, or return, on the cumulative Contributed Equity in AWCMA at 10 percent for the time period between December 31, 2013 and the new calculation date.¹⁴⁰
 - Subtract from the Net Plant Purchase Price any dividends paid by AWCMA between December 31, 2013 and the new calculation date.¹⁴¹

¹³⁷ AWCMA debt should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year.

¹³⁸ The concluded Willamette Purchase Price, excluding the Water Treatment Plant, was \$84,280,000. *See* Willamette Report at p. 18.

¹³⁹ Any AWCMA contributions should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for the 1990, 1991, 1998, and 2007 contributions.

¹⁴⁰ The interest should accrue on the total Contributed Equity as of the start of each year, including any additional equity contributed beyond December 31, 2013. The interest component should be prorated for any partial year.

¹⁴¹ Any AWCMA dividends should be allocated to the Hingham Service Area using the percentage of AWCMA gross plant in the Hingham Service Area in that year, as was done for all AWCMA dividends from 1989 through 2013.

X. Conclusion

115. The Statute provides a return to the owner of the Hingham Water System in the event that the Town exercises its right to acquire the Hingham Water System under the Statute. Therefore, the current owner should be compensated for the actual investment in the Hingham Water System, plus receive a rate of return as specified in the Statute, offset by any return already received. The approach outlined in Section V above achieves this goal. Based on that approach, the Purchase Price under the Statute is \$58,629,875, or \$34,717,871 excluding the Water Treatment Plant.
116. The Contributed Equity Purchase Price, based on the books and records and starting the calculation in 1879, results in a price of \$51,727,051, or \$20,711,451 excluding the Water Treatment Plant.
117. I provide a description of a number of errors contained in the Willamette Purchase Price described in the Willamette Report, including that (1) the calculation uses gross plant instead of net plant, (2) the calculations assume the current owner should receive a return on assets funded by debt, and (3) the calculations add to the purchase price costs associated with the Willamette Intangible Assets.
118. Finally, I calculated a Net Plant Purchase Price, based on the current net plant of the Hingham Water System, of \$58,420,742, or \$27,181,142 excluding the Water Treatment Plant.

Appendix A: Documents Considered

Pleadings
Complaint dated July 3, 2013
Motion to Reserve and Report dated July 3, 2013
Response in Opposition to Plaintiff's Motion to Reserve and Report dated August 19, 2013
Town of Hingham's Reply to Opposition to Motion to Reserve and Report dated August 23, 2013
Aquarion Water Company of Massachusetts, Inc. and Aquarion Water Capital of Massachusetts, Inc.'s Answer dated October 23, 2013
Plaintiff's First Set of Interrogatories to Defendant Aquarion Water Capital of Massachusetts, Inc. dated November 15, 2013
Plaintiff's First Set of Interrogatories to Defendant Aquarion Water Company of Massachusetts, Inc. dated November 15, 2013
Plaintiff's Response to Defendants' First Set of Interrogatories dated December 16, 2013
Aquarion Water Capital of Massachusetts, Inc.'s Responses to Plaintiff's First Request for Production of Documents dated December 30, 2013
Aquarion Water Company of Massachusetts, Inc.'s Responses to Plaintiff's First Request for Production of Documents dated December 30, 2013
Aquarion Water Company of Massachusetts, Inc.'s Responses to Plaintiff's First Set of Interrogatories dated January 2, 2014.
Aquarion Water Capital of Massachusetts, Inc.'s Responses to Plaintiff's First Set of Interrogatories dated January 2, 2014.

Depositions (inclusive of exhibits)
Deposition of Charles V. Firlotte (May 6, 2014)
Deposition of Troy Dixon, Vol. I (May 6, 2014)
Deposition of Troy Dixon, Vol. II (May 7, 2014)
Deposition of John P. Walsh (May 8, 2014)
Trial transcripts from the Town of Oxford v. Aquarion Water Company of Massachusetts, Inc. (Docket WOCV2009-0592E) and Aquarion Water Company of Massachusetts, Inc. v. Town of Oxford (Docket WOCV2009-1496D): Volume 4 (May 14, 2013), Volume 5 (May 15, 2013), and Volume 6 (May 16, 2013)

Case Documents	Bates Range
AWW/Aquarion Purchase Agreement dated August 29, 2001	AQ-026074 - AQ-026128
Purchase Agreement Schedules (2001.08.29)	AQ-026129 - AQ-026195
Purchase Price Adjustments.xls	AQ-026196
Sale of CT-American to Aquarion	AQ-028105 - AQ-028491
Sale of Hampton WW to Aquarion	AQ-028492 - AQ-028834
Sale of Mass-American to Aquarion	AQ-028835 - AQ-029154
Sale of NY-American to Aquarion	AQ-029155 - AQ-029430
Sale of Mass-Capital to Aquarion	AQ-031263 - AQ-031543
The Acquisition of Aquarion by MUI dated April 30, 2007 (Index)	AQ-027191-AQ-027197
MUI Stock Purchase Agreement dated February 24, 2006	AQ-027198-AQ-027263
CT DPU Change of Control Approval	AQ-027451-AQ-027465
Cross Receipt dated April 30, 2007	AQ-027537-AQ-027538

Expert Report of Carl Jenkins
Appendix A: Documents Considered

Mass Capital Audited Financials (1995 - 1997)	AQ-023759 - AQ-023801
Mass Capital Audited Financials (2000 - 2001)	AQ-023583 - AQ-023599
Aquarion Water Capital Audited Financials (2002 - 2012)	AQ-023600 - AQ-023758
Aquarion Water Capital Audited Financials (2013)	AQ-033074 - AQ-033088
Hingham Water Company DPU Report (1929 - 1980)	AQ-000001 - AQ-001697
Hingham Water Company DPU Report (1981 - 1982)	AQ-029431 - AQ-029534
Hingham Water Company DPU Report (1983)	AQ-001698 - AQ-001751
Hingham Water Company DPU Report (1984)	AQ-029535 - AQ-029591
Hingham Water Company DPU Report (1985 - 1988)	AQ-001752 - AQ-002217
Mass-American DPU Report (1989)	AQ-002218 - AQ-002314
Mass-American DPU Report (1991 - 2001)	AQ-002315 - AQ-003647
AWCMA DPU Report (2002 - 2012)	AQ-003648 - AQ-004820
Hingham Water Company Audited Financials (1988)	AQ-004976 - AQ-005009
Mass-American Water Co Audited Financials (2000 - 2001)	AQ-005010 - AQ-005036
AWCMA Audited Financials (2002 - 2012)	AQ-005037 - AQ-005302
AWCMA Audited Financials (2013)	AQ-033089 - AQ-033115
AWCMA Income Statement and Balance Sheet as of April 30, 2007	AQ-033070 - AQ-033071
Aquarion Capital Income Statement and Balance Sheet as of April 30, 2007	AQ-033072 - AQ-033073
Special Investigation of Hingham Water Co. (Rittenhouse & Co) dated December 27, 1935	AQ-032105-AQ-032126
Engineering Feasibility Report dated July 28, 1995 (Appendix B to the MIFA Revenue Bond Offering Memo dated July 1, 1995)	AQ-025744 - AQ-025803
Aquarion Water Capital Amended Facility Lease Agreement dated October 1, 2012	AQ-025849 - AQ-025909
Mass Capital Facility Lease Agreement dated July 1, 1995	AQ-025910 - AQ-026027
Mass Capital Ground Lease dated July 1, 1995	AQ-026028 - AQ-026073
Hingham Water Company Stockholder List dated February 5, 1929	AQ-WTP 012272
Hingham Water Company Stockholder List dated February 20, 1939	AQ-WTP 012956
Meeting Minutes of the First Meeting of the Hingham Water Company	AQ-WTP 016325-16327
Hingham Water Company Records (1880-1881)	AQ-WTP 016343-391
Hingham Water Company Records (1885-1886)	AQ-WTP 016417-441
Hingham Water Company Records (1920-1921)	AQ-WTP 016958-980
Meeting Minutes of a Special Meeting of the Directors of the Hingham Water Company dated November 27, 1928	AQ-WTP 013329
Hingham Water Company Stockholder List dated August 5, 1929	AQ-WTP 013419
Hingham Water Company Stockholder List dated September 8, 1958	AQ-WTP 013631
Hingham Water Company Stockholder List dated July 26, 1971	AQ-WTP 014266
Hingham Water Company Unanimous Consent of the Stockholders dated May 26, 1983	AQ-WTP 014819
Hingham Water Company Board of Directors July 26, 1985 Meeting Minutes	AQ-WTP 014891 - 014898
Hingham Water Company Consent of Stockholder dated October 3, 1985	AQ-WTP 014902
Hingham Water Company Unanimous Consent of the Stockholders dated May 21, 1987	AQ-WTP 014959
Aquarion Water Capital Financial Statements- Unaudited Full Year 2002	N/A
Other documents produced by the parties not specifically identified in the list above	AQ-000001 - AQ-033115 AQ-WTP 000001 - 017376

Public Documents
Damadoran, Aswath. 2002. <i>Investment Valuation: Tools and Techniques for Determining the Value of Any Asset</i> , 2nd Ed. (New York, John Wiley & Sons, Inc.), p. 501-508.
Aquarion Water Company of Connecticut: Annual Report to the Department of Public Utility Control of the State of Connecticut (2006)
Aquarion Water Company of New Hampshire: Annual Report to the N.H. Public Utilities Commission (2006)
Massachusetts Department of Telecommunications and Energy: D.T.E. 00-105 Order dated April 26, 2001
Massachusetts Department of Public Utilities: D.P.U. 95-118 Order dated May 31, 1996
Massachusetts Department of Public Utilities: D.P.U. 08-27 Order dated March 31, 2009
Massachusetts Department of Public Utilities: D.P.U. 11-43 Order dated March 30, 2012
Massachusetts Department of Public Utilities: DPU 08-27 Initial Brief of Aquarion Water Company of Massachusetts, Inc. dated January 21, 2009.
Massachusetts Department of Public Utilities: 220 CMR 52.00, "Uniform System of Accounts for Water Companies" dated July 12, 1923.
Massachusetts Department of Public Utilities: D.P.U. 89-134 Order dated December 29, 1989.
State of New Hampshire Public Utilities Commission: DW 06-094, Testimony of Charles V. Firlotte at p. 56-57 (September 20, 2006).
AWCMA DPU Report (2013)
Seymour, Charles W.S. "History of the Town of Hingham, Massachusetts: Water Works," 1893, p. 261-270
"Kelda Abandons Aquarion," <i>Global Water Intelligence Vol 7 Issue 3</i> , (March 2006).
American Water Works Company, Inc. Press Release dated August 30, 2001, "American Water Works Company's New England Operations to be Acquired by Kelda Group PLC, Aquarion."
United States Tax Court Decision dated January 31, 1956: 25 T.C. 903 (1956). <i>American Water Works Company, Inc. v. Commissioner.</i>
Town of Oxford v. Oxford Water Company Decision dated March 29, 1984 (391 Mass. 581; 463 N.E.2d 330)
Town of Southbridge v. Southbridge Water Supply Company Decision dated October 15, 1976 (371 Mass. 209; 355 N.E.2d 920)
Town of Southbridge v. Southbridge Water Supply Company Decision dated January 14, 1992 (411 Mass. 675; 583 N.E.2d 1291)
Town of Falmouth v. Falmouth Water Co. Decision dated January 3, 1902 (180 Mass. 325; 62 N.E. 255)
Inhabitants of Tisbury v. Vineyard Haven Water Co. Decision dated November 26, 1906 (193 Mass. 196; 79 N.E. 256)
Town of Edgartown v. Edgartown Water Company Decision dated April 15, 1993 (415 Mass. 32; 610 N.E.2d 958)
Capital IQ Transaction Detail (Transaction ID IQTR8682237).
Financial and other information obtained from Capital IQ
Willamette Formula Purchase Price Analysis dated June 29, 2012
Willamette Summary Appraisal Report dated June 29, 2012
Various documents obtained from the Town of Hingham Water Company Acquisition Study Committee Web Site (http://www.hingham-ma.gov/Committees/Water_Company/documents.html)
Massachusetts Acts of 1879, Chapter 139.
Massachusetts Acts of 1881, Chapter 59.
Massachusetts Acts of 1924, Chapter 168.

Appendix C: Supporting Schedules

Schedule 1: Purchase Price Summary (Actual Equity Invested by Current Controlling Owner)

PURCHASE PRICE: INCLUDING WTP	4/30/2007	12/31/2007	12/31/2008	12/31/2009	12/31/2010	12/31/2011	12/31/2012	12/31/2013	Totals
Equity Invested (Hingham S.A. + WTP)	\$ 19,571,996	\$ 1,650,269	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cumulative Equity Investment	\$ 19,571,996	\$ 21,222,265	\$ 21,222,265	\$ 21,222,265	\$ 21,222,265	\$ 21,222,265	\$ 21,222,265	\$ 21,222,265	\$ 21,222,265
Return on Equity Investment		\$ 1,424,508	\$ 2,122,226	\$ 2,122,226	\$ 2,122,226	\$ 2,122,226	\$ 2,122,226	\$ 2,122,226	\$ 14,157,867
Dividends (Hingham S.A. + WTP)		\$ 3,185,175	\$ 175,575	\$ 238,546	\$ 136,508	\$ 1,504,000	\$ 936,000	\$ 1,061,288	\$ 7,237,093

Purchase Price Summary	Including WTP
April 2007 Investment	\$ 19,571,996
December 2007 Investment	\$ 1,650,269
+ 10% Interest	\$ 14,157,867
- Dividends	\$ (7,237,093)
+ Retirement of Debt (12/31/2013)	\$ 30,486,836
Total Purchase Price	\$ 58,629,875

PURCHASE PRICE: EXCLUDING WTP	4/30/2007	12/31/2007	12/31/2008	12/31/2009	12/31/2010	12/31/2011	12/31/2012	12/31/2013	Totals
Equity Invested (Hingham S.A.)	\$ 13,997,721	\$ 1,650,269	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cumulative Equity Investment	\$ 13,997,721	\$ 15,647,989	\$ 15,647,989	\$ 15,647,989	\$ 15,647,989	\$ 15,647,989	\$ 15,647,989	\$ 15,647,989	\$ 15,647,989
Return on Equity Investment		\$ 1,050,344	\$ 1,564,799	\$ 1,564,799	\$ 1,564,799	\$ 1,564,799	\$ 1,564,799	\$ 1,564,799	\$ 10,439,138
Dividends (Hingham S.A.)		\$ 85,175	\$ 175,575	\$ 238,546	\$ 136,508	\$ -	\$ -	\$ 385,288	\$ 1,021,093

Purchase Price Summary	Excluding WTP
April 2007 Investment	\$ 13,997,721
December 2007 Investment	\$ 1,650,269
+ 10% Interest	\$ 10,439,138
- Dividends	\$ (1,021,093)
+ Retirement of Debt (12/31/2013)	\$ 9,651,836
Purchase Price	\$ 34,717,871

Schedule 2: Contributed Equity Purchase Price Summary (continued)

12 months ending December 31,	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Contributed Equity (Hingham S.A.)	\$ 672	\$ 672	\$ 672	\$ 872	\$ 872	\$ 868	\$ 864	\$ 960	\$ 956	\$ 952
Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributed Equity (Hingham S.A. + WTP)	\$ 672	\$ 672	\$ 672	\$ 872	\$ 872	\$ 868	\$ 864	\$ 960	\$ 956	\$ 952
Return on Contributed Equity (Hingham S.A.)	\$ 67	\$ 67	\$ 67	\$ 87	\$ 87	\$ 87	\$ 86	\$ 96	\$ 96	\$ 95
Return on Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 67	\$ 67	\$ 67	\$ 87	\$ 87	\$ 87	\$ 86	\$ 96	\$ 96	\$ 95
12 months ending December 31,	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Contributed Equity (Hingham S.A.)	\$ 948	\$ 944	\$ 1,090	\$ 1,086	\$ 1,079	\$ 1,072	\$ 1,065	\$ 1,058	\$ 1,051	\$ 1,044
Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributed Equity (Hingham S.A. + WTP)	\$ 948	\$ 944	\$ 1,090	\$ 1,086	\$ 1,079	\$ 1,072	\$ 1,065	\$ 1,058	\$ 1,051	\$ 1,044
Return on Contributed Equity (Hingham S.A.)	\$ 95	\$ 94	\$ 109	\$ 109	\$ 108	\$ 107	\$ 107	\$ 106	\$ 105	\$ 104
Return on Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 95	\$ 94	\$ 109	\$ 109	\$ 108	\$ 107	\$ 107	\$ 106	\$ 105	\$ 104
12 months ending December 31,	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Contributed Equity (Hingham S.A.)	\$ 1,187	\$ 1,176	\$ 1,165	\$ 1,154	\$ 1,143	\$ 1,132	\$ 1,121	\$ 1,110	\$ 1,299	\$ 1,288
Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributed Equity (Hingham S.A. + WTP)	\$ 1,187	\$ 1,176	\$ 1,165	\$ 1,154	\$ 1,143	\$ 1,132	\$ 1,121	\$ 1,110	\$ 1,299	\$ 1,288
Return on Contributed Equity (Hingham S.A.)	\$ 119	\$ 118	\$ 117	\$ 115	\$ 114	\$ 113	\$ 112	\$ 111	\$ 130	\$ 129
Return on Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 119	\$ 118	\$ 117	\$ 115	\$ 114	\$ 113	\$ 112	\$ 111	\$ 130	\$ 129
12 months ending December 31,	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Contributed Equity (Hingham S.A.)	\$ 1,277	\$ 1,266	\$ 1,405	\$ 1,394	\$ 1,383	\$ 1,372	\$ 1,361	\$ 1,350	\$ 1,347	\$ 2,024
Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributed Equity (Hingham S.A. + WTP)	\$ 1,277	\$ 1,266	\$ 1,405	\$ 1,394	\$ 1,383	\$ 1,372	\$ 1,361	\$ 1,350	\$ 1,347	\$ 2,024
Return on Contributed Equity (Hingham S.A.)	\$ 128	\$ 127	\$ 141	\$ 139	\$ 138	\$ 137	\$ 136	\$ 135	\$ 135	\$ 202
Return on Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 128	\$ 127	\$ 141	\$ 139	\$ 138	\$ 137	\$ 136	\$ 135	\$ 135	\$ 202
12 months ending December 31,	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Contributed Equity (Hingham S.A.)	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 3,447	\$ 3,447	\$ 3,447
Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654
Contributed Equity (Hingham S.A. + WTP)	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 8,427	\$ 8,427	\$ 8,427	\$ 9,101	\$ 9,101	\$ 9,101
Return on Contributed Equity (Hingham S.A.)	\$ 277	\$ 277	\$ 277	\$ 277	\$ 277	\$ 277	\$ 277	\$ 345	\$ 345	\$ 345
Return on Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 277	\$ 277	\$ 277	\$ 277	\$ 843	\$ 843	\$ 843	\$ 910	\$ 910	\$ 910
12 months ending December 31,	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Contributed Equity (Hingham S.A.)	\$ 3,447	\$ 3,447	\$ 3,447	\$ 3,447	\$ 3,447	\$ 3,447	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097
Contributed Equity (WTP)	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654
Contributed Equity (Hingham S.A. + WTP)	\$ 9,101	\$ 9,101	\$ 9,101	\$ 9,101	\$ 9,101	\$ 9,101	\$ 10,751	\$ 10,751	\$ 10,751	\$ 10,751
Return on Contributed Equity (Hingham S.A.)	\$ 345	\$ 345	\$ 345	\$ 345	\$ 345	\$ 345	\$ 510	\$ 510	\$ 510	\$ 510
Return on Contributed Equity (WTP)	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 910	\$ 910	\$ 910	\$ 910	\$ 910	\$ 910	\$ 1,075	\$ 1,075	\$ 1,075	\$ 1,075
12 months ending December 31,	2011	2012	2013							
Contributed Equity (Hingham S.A.)	\$ 5,097	\$ 5,097	\$ 5,097							
Contributed Equity (WTP)	\$ 5,654	\$ 5,654	\$ 5,654							
Contributed Equity (Hingham S.A. + WTP)	\$ 10,751	\$ 10,751	\$ 10,751							
Return on Contributed Equity (Hingham S.A.)	\$ 510	\$ 510	\$ 510							
Return on Contributed Equity (WTP)	\$ 565	\$ 565	\$ 565							
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 1,075	\$ 1,075	\$ 1,075							

Contributed Equity Purchase Price Summary	Including WTP	Excluding WTP
Total Contributed Equity	\$ 10,750,928	\$ 5,096,928
plus Interest	\$ 26,343,284	\$ 15,600,684
Less Dividends	\$ (15,853,997)	\$ (9,637,997)
plus Retirement of Outstanding Debt	\$ 30,486,836	\$ 9,651,836
Contributed Equity Purchase Price	\$ 51,727,051	\$ 20,711,451

Schedule 3: Net Plant Purchase Price Summary (continued)

12 months ending December 31,	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Contributed Equity (Hingham S.A.)	\$ 672	\$ 672	\$ 672	\$ 872	\$ 872	\$ 868	\$ 864	\$ 960	\$ 956	\$ 952
Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributed Equity (Hingham S.A. + WTP)	\$ 672	\$ 672	\$ 672	\$ 872	\$ 872	\$ 868	\$ 864	\$ 960	\$ 956	\$ 952
Return on Contributed Equity (Hingham S.A.)	\$ 67	\$ 67	\$ 67	\$ 87	\$ 87	\$ 87	\$ 86	\$ 96	\$ 96	\$ 95
Return on Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 67	\$ 67	\$ 67	\$ 87	\$ 87	\$ 87	\$ 86	\$ 96	\$ 96	\$ 95
12 months ending December 31,	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Contributed Equity (Hingham S.A.)	\$ 948	\$ 944	\$ 1,090	\$ 1,086	\$ 1,079	\$ 1,072	\$ 1,065	\$ 1,058	\$ 1,051	\$ 1,044
Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributed Equity (Hingham S.A. + WTP)	\$ 948	\$ 944	\$ 1,090	\$ 1,086	\$ 1,079	\$ 1,072	\$ 1,065	\$ 1,058	\$ 1,051	\$ 1,044
Return on Contributed Equity (Hingham S.A.)	\$ 95	\$ 94	\$ 109	\$ 109	\$ 108	\$ 107	\$ 107	\$ 106	\$ 105	\$ 104
Return on Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 95	\$ 94	\$ 109	\$ 109	\$ 108	\$ 107	\$ 107	\$ 106	\$ 105	\$ 104
12 months ending December 31,	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Contributed Equity (Hingham S.A.)	\$ 1,187	\$ 1,176	\$ 1,165	\$ 1,154	\$ 1,143	\$ 1,132	\$ 1,121	\$ 1,110	\$ 1,299	\$ 1,288
Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributed Equity (Hingham S.A. + WTP)	\$ 1,187	\$ 1,176	\$ 1,165	\$ 1,154	\$ 1,143	\$ 1,132	\$ 1,121	\$ 1,110	\$ 1,299	\$ 1,288
Return on Contributed Equity (Hingham S.A.)	\$ 119	\$ 118	\$ 117	\$ 115	\$ 114	\$ 113	\$ 112	\$ 111	\$ 130	\$ 129
Return on Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 119	\$ 118	\$ 117	\$ 115	\$ 114	\$ 113	\$ 112	\$ 111	\$ 130	\$ 129
12 months ending December 31,	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Contributed Equity (Hingham S.A.)	\$ 1,277	\$ 1,266	\$ 1,405	\$ 1,394	\$ 1,383	\$ 1,372	\$ 1,361	\$ 1,350	\$ 1,347	\$ 2,024
Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributed Equity (Hingham S.A. + WTP)	\$ 1,277	\$ 1,266	\$ 1,405	\$ 1,394	\$ 1,383	\$ 1,372	\$ 1,361	\$ 1,350	\$ 1,347	\$ 2,024
Return on Contributed Equity (Hingham S.A.)	\$ 128	\$ 127	\$ 141	\$ 139	\$ 138	\$ 137	\$ 136	\$ 135	\$ 135	\$ 202
Return on Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 128	\$ 127	\$ 141	\$ 139	\$ 138	\$ 137	\$ 136	\$ 135	\$ 135	\$ 202
12 months ending December 31,	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Contributed Equity (Hingham S.A.)	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 3,447	\$ 3,447	\$ 3,447
Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654
Contributed Equity (Hingham S.A. + WTP)	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 8,427	\$ 8,427	\$ 8,427	\$ 9,101	\$ 9,101	\$ 9,101
Return on Contributed Equity (Hingham S.A.)	\$ 277	\$ 277	\$ 277	\$ 277	\$ 277	\$ 277	\$ 277	\$ 345	\$ 345	\$ 345
Return on Contributed Equity (WTP)	\$ -	\$ -	\$ -	\$ -	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 277	\$ 277	\$ 277	\$ 277	\$ 843	\$ 843	\$ 843	\$ 910	\$ 910	\$ 910
12 months ending December 31,	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Contributed Equity (Hingham S.A.)	\$ 3,447	\$ 3,447	\$ 3,447	\$ 3,447	\$ 3,447	\$ 3,447	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097
Contributed Equity (WTP)	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654	\$ 5,654
Contributed Equity (Hingham S.A. + WTP)	\$ 9,101	\$ 9,101	\$ 9,101	\$ 9,101	\$ 9,101	\$ 9,101	\$ 10,751	\$ 10,751	\$ 10,751	\$ 10,751
Return on Contributed Equity (Hingham S.A.)	\$ 345	\$ 345	\$ 345	\$ 345	\$ 345	\$ 345	\$ 510	\$ 510	\$ 510	\$ 510
Return on Contributed Equity (WTP)	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565	\$ 565
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 910	\$ 910	\$ 910	\$ 910	\$ 910	\$ 910	\$ 1,075	\$ 1,075	\$ 1,075	\$ 1,075
12 months ending December 31,	2011	2012	2013							
Contributed Equity (Hingham S.A.)	\$ 5,097	\$ 5,097	\$ 5,097							
Contributed Equity (WTP)	\$ 5,654	\$ 5,654	\$ 5,654							
Contributed Equity (Hingham S.A. + WTP)	\$ 10,751	\$ 10,751	\$ 10,751							
Return on Contributed Equity (Hingham S.A.)	\$ 510	\$ 510	\$ 510							
Return on Contributed Equity (WTP)	\$ 565	\$ 565	\$ 565							
Return on Contributed Equity (Hingham S.A. + WTP)	\$ 1,075	\$ 1,075	\$ 1,075							

Net Plant Purchase Price Summary	Including WTP	Excluding WTP
Ending Net Plant	\$ 47,931,454	\$ 21,218,454
plus Interest	\$ 26,343,284	\$ 15,600,684
Less Dividends	\$ (15,853,997)	\$ (9,637,997)
Net Plant Purchase Price	\$ 58,420,742	\$ 27,181,142

Schedule 4: Dividend Summary

12 months ending June 30,		1879	1880	1881
Preferred Dividends (Hingham S.A.)		\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)		\$ -	\$ -	\$ -
Dividends (WTP)		\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)		\$ -	\$ -	\$ -

12 months ending June 30,		1882	1883	1884	1885	1886	1887	1888	1889	1890	1891
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)	\$ 5	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 5	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7

12 months ending June 30,		1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7

12 months ending June 30,		1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)	\$ 7	\$ 7	\$ 7	\$ 8	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 14
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 7	\$ 7	\$ 7	\$ 8	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 14

12 months ending June 30,		1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)	\$ 18	\$ 18	\$ 24	\$ 24	\$ 24	\$ 28	\$ 32	\$ 32	\$ 32	\$ 35	\$ 35
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 18	\$ 18	\$ 24	\$ 24	\$ 24	\$ 28	\$ 32	\$ 32	\$ 32	\$ 35	\$ 35

6 months ending December 31, 1921		12 months ending December 31,									
		1922	1923	1924	1925	1926	1927	1928	1929	1930	
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Common Dividends (Hingham S.A.)	\$ 18	\$ 35	\$ 35	\$ 35	\$ 26	\$ 26	\$ 26	\$ 26	\$ 13	\$ -	
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Dividends (Hingham S.A. + WTP)	\$ 18	\$ 35	\$ 35	\$ 35	\$ 26	\$ 26	\$ 26	\$ 26	\$ 13	\$ -	

12 months ending December 31,		1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)	\$ 70	\$ 57	\$ 53	\$ 35	\$ 35	\$ 44	\$ 35	\$ 35	\$ 35	\$ 35	\$ 22
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 70	\$ 57	\$ 53	\$ 35	\$ 35	\$ 44	\$ 35	\$ 35	\$ 35	\$ 35	\$ 22

Schedule 4: Dividend Summary (continued)

12 months ending December 31,	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)	\$ 29	\$ 25	\$ 40	\$ 37	\$ 35	\$ 23	\$ 23	\$ 30	\$ 36	\$ 20
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 29	\$ 25	\$ 40	\$ 37	\$ 35	\$ 23	\$ 23	\$ 30	\$ 36	\$ 20
12 months ending December 31,	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ 5	\$ 11	\$ 10	\$ 10	\$ 10	\$ 10	\$ 9
Common Dividends (Hingham S.A.)	\$ 21	\$ 24	\$ 67	\$ 45	\$ 40	\$ 28	\$ 28	\$ 57	\$ 72	\$ 81
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 21	\$ 24	\$ 67	\$ 49	\$ 51	\$ 39	\$ 38	\$ 67	\$ 81	\$ 90
12 months ending December 31,	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Preferred Dividends (Hingham S.A.)	\$ 9	\$ 9	\$ 12	\$ 16	\$ 15	\$ 15	\$ 15	\$ 14	\$ 14	\$ 14
Common Dividends (Hingham S.A.)	\$ 80	\$ 93	\$ 105	\$ 85	\$ 100	\$ 99	\$ 85	\$ 57	\$ 50	\$ 57
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 89	\$ 102	\$ 117	\$ 101	\$ 115	\$ 114	\$ 99	\$ 71	\$ 64	\$ 70
12 months ending December 31,	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Preferred Dividends (Hingham S.A.)	\$ 13	\$ 13	\$ 12	\$ 12	\$ 11	\$ 11	\$ 10	\$ 9	\$ 9	\$ 8
Common Dividends (Hingham S.A.)	\$ 57	\$ 60	\$ 18	\$ 41	\$ 14	\$ 82	\$ 41	\$ 29	\$ -	\$ 50
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 70	\$ 73	\$ 30	\$ 52	\$ 26	\$ 92	\$ 51	\$ 39	\$ 9	\$ 59
12 months ending December 31,	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Preferred Dividends (Hingham S.A.)	\$ 8	\$ 7	\$ 7	\$ 6	\$ 5	\$ 5	\$ 4	\$ 4	\$ 4	\$ 0
Common Dividends (Hingham S.A.)	\$ 51	\$ 27	\$ -	\$ 131	\$ 111	\$ -	\$ -	\$ -	\$ -	\$ -
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 58	\$ 34	\$ 7	\$ 137	\$ 116	\$ 5	\$ 4	\$ 4	\$ 4	\$ 0
12 months ending December 31,	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)	\$ 194	\$ 360	\$ 436	\$ 325	\$ 210	\$ 279	\$ 306	\$ 342	\$ 378	\$ 201
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 194	\$ 360	\$ 436	\$ 325	\$ 210	\$ 279	\$ 306	\$ 342	\$ 378	\$ 201
12 months ending December 31,	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)	\$ 269	\$ 293	\$ 342	\$ 361	\$ 246	\$ 272	\$ 85	\$ 176	\$ 239	\$ 137
Dividends (WTP)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,100	\$ -	\$ -	\$ -
Total Dividends (Hingham S.A. + WTP)	\$ 269	\$ 293	\$ 342	\$ 361	\$ 246	\$ 272	\$ 3,185	\$ 176	\$ 239	\$ 137
12 months ending December 31,	2011	2012	2013							
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -							
Common Dividends (Hingham S.A.)	\$ -	\$ -	\$ 385							
Dividends (WTP)	\$ 1,504	\$ 936	\$ 676							
Total Dividends (Hingham S.A. + WTP)	\$ 1,504	\$ 936	\$ 1,061							
	Including WTP		Excluding WTP							
Total Dividends	\$	15,853,997	\$	9,637,997						

Schedule 5: Allocation of AWCMA Data to Hingham Service Area

12 months ending December 31,	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
AWCMA Data:													
Preferred Dividends (AWCMA)	N/A	\$ 6	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (AWCMA)	N/A	\$ -	\$ -	\$ 311	\$ 582	\$ 711	\$ 524	\$ 320	\$ 419	\$ 456	\$ 508	\$ 577	\$ 341
Total Debt (AWCMA)	N/A	\$ 7,541	\$ 7,277	\$ 7,849	\$ 8,546	\$ 9,704	\$ 13,763	\$ 8,490	\$ 11,082	\$ 11,054	\$ 11,509	\$ 11,509	\$ 11,896
Contributed Equity (AWCMA)	\$ 2,347	\$ 2,342	\$ 3,437	\$ 4,637	\$ 4,637	\$ 4,637	\$ 4,637	\$ 4,637	\$ 4,637	\$ 4,637	\$ 5,637	\$ 5,637	\$ 5,637
Gross Plant (AWCMA)	N/A	\$ 16,907	\$ 17,646	\$ 18,241	\$ 19,074	\$ 19,801	\$ 20,819	\$ 23,548	\$ 25,832	\$ 26,579	\$ 27,641	\$ 29,935	\$ 31,330
Depreciation reserve (AWCMA)	N/A	\$ 3,524	\$ 3,639	\$ 3,871	\$ 4,064	\$ 3,998	\$ 4,014	\$ 4,140	\$ 4,075	\$ 4,285	\$ 4,592	\$ 4,938	\$ 5,056
Net Plant (AWCMA)	N/A	\$ 13,383	\$ 14,007	\$ 14,370	\$ 15,009	\$ 15,803	\$ 16,805	\$ 19,408	\$ 21,757	\$ 22,294	\$ 23,049	\$ 24,997	\$ 26,274
% Gross Plant in Hingham S.A. (Excl WTP)	N/A	63.0%	61.9%	62.4%	61.9%	61.3%	62.1%	65.7%	66.6%	67.2%	67.4%	65.5%	58.8%
Hingham Service Area Allocation:													
Preferred Dividends (Hingham S.A.)	N/A	\$ 4	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)	N/A	\$ -	\$ -	\$ 194	\$ 360	\$ 436	\$ 325	\$ 210	\$ 279	\$ 306	\$ 342	\$ 378	\$ 201
Total Debt (Hingham S.A.)	N/A	\$ 4,750	\$ 4,505	\$ 4,897	\$ 5,288	\$ 5,953	\$ 8,544	\$ 5,581	\$ 7,379	\$ 7,429	\$ 7,752	\$ 7,541	\$ 7,000
Contributed Equity (Hingham S.A.)	\$ 1,350	\$ 1,347	\$ 2,024	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 2,773	\$ 3,447	\$ 3,447	\$ 3,447
Gross Plant (Hingham S.A.)	N/A	\$ 10,650	\$ 10,924	\$ 11,380	\$ 11,802	\$ 12,147	\$ 12,924	\$ 15,478	\$ 17,202	\$ 17,862	\$ 18,619	\$ 19,615	\$ 18,436
Depreciation reserve (Hingham S.A.)	N/A	\$ 2,220	\$ 2,253	\$ 2,415	\$ 2,515	\$ 2,452	\$ 2,492	\$ 2,721	\$ 2,713	\$ 2,879	\$ 3,093	\$ 3,236	\$ 2,975
Net Plant (Hingham S.A.)	N/A	\$ 8,430	\$ 8,671	\$ 8,965	\$ 9,287	\$ 9,695	\$ 10,432	\$ 12,757	\$ 14,488	\$ 14,983	\$ 15,526	\$ 16,380	\$ 15,461
12 months ending December 31,													
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
AWCMA Data:													
Preferred Dividends (AWCMA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (AWCMA)	\$ 442	\$ 479	\$ 640	\$ 663	\$ 453	\$ 510	\$ 160	\$ 326	\$ 440	\$ 247	\$ -	\$ -	\$ 690
Total Debt (AWCMA)	\$ 13,865	\$ 14,490	\$ 19,166	\$ 20,229	\$ 21,292	\$ 19,852	\$ 18,209	\$ 19,865	\$ 20,320	\$ 19,573	\$ 19,776	\$ 19,330	\$ 17,273
Contributed Equity (AWCMA)	\$ 5,637	\$ 5,637	\$ 5,637	\$ 5,637	\$ 5,637	\$ 5,637	\$ 8,737	\$ 8,737	\$ 8,737	\$ 8,737	\$ 8,737	\$ 8,737	\$ 8,737
Gross Plant (AWCMA)	\$ 32,870	\$ 33,207	\$ 40,190	\$ 42,298	\$ 46,189	\$ 48,166	\$ 51,309	\$ 53,364	\$ 54,487	\$ 60,227	\$ 61,707	\$ 62,800	\$ 63,888
Depreciation reserve (AWCMA)	\$ 5,590	\$ 6,103	\$ 6,600	\$ 7,380	\$ 8,300	\$ 9,396	\$ 10,245	\$ 11,061	\$ 11,918	\$ 11,759	\$ 12,620	\$ 13,983	\$ 14,891
Net Plant (AWCMA)	\$ 27,280	\$ 27,104	\$ 33,590	\$ 34,917	\$ 37,889	\$ 38,770	\$ 41,064	\$ 42,303	\$ 42,569	\$ 48,469	\$ 49,088	\$ 48,818	\$ 48,997
% Gross Plant in Hingham S.A. (Excl WTP)	60.8%	61.2%	53.5%	54.5%	54.3%	53.3%	53.2%	53.8%	54.2%	55.3%	55.9%	55.9%	55.9%
Hingham Service Area Allocation:													
Preferred Dividends (Hingham S.A.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Dividends (Hingham S.A.)	\$ 269	\$ 293	\$ 342	\$ 361	\$ 246	\$ 272	\$ 85	\$ 176	\$ 239	\$ 137	\$ -	\$ -	\$ 385
Total Debt (Hingham S.A.)	\$ 8,426	\$ 8,864	\$ 10,251	\$ 11,024	\$ 11,560	\$ 10,579	\$ 9,693	\$ 10,688	\$ 11,016	\$ 10,817	\$ 11,051	\$ 10,801	\$ 9,652
Contributed Equity (Hingham S.A.)	\$ 3,447	\$ 3,447	\$ 3,447	\$ 3,447	\$ 3,447	\$ 3,447	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097
Gross Plant (Hingham S.A.)	\$ 19,976	\$ 20,313	\$ 21,496	\$ 23,050	\$ 25,077	\$ 25,666	\$ 27,314	\$ 28,711	\$ 29,540	\$ 33,286	\$ 34,482	\$ 35,092	\$ 35,700
Depreciation reserve (Hingham S.A.)	\$ 3,397	\$ 3,734	\$ 3,530	\$ 4,022	\$ 4,506	\$ 5,007	\$ 5,454	\$ 5,951	\$ 6,461	\$ 6,499	\$ 7,052	\$ 7,813	\$ 8,321
Net Plant (Hingham S.A.)	\$ 16,579	\$ 16,580	\$ 17,966	\$ 19,028	\$ 20,571	\$ 20,659	\$ 21,860	\$ 22,760	\$ 23,079	\$ 26,787	\$ 27,430	\$ 27,279	\$ 27,379