AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-4

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at page 3, lines 8-19, where she states "use of a natural gas distribution group is inappropriate…" Please indicate if Ms. Ahern has, in the course of providing testimony during the past five years, used a natural gas distribution group as a proxy group for a water utility for the purpose of estimating the cost of common equity for the water utility, and identify the corresponding matters in which such testimony was developed and provide a copy of each such testimony.

Response: Please see Attachment Hampton 4-4(a) for a listing of the rate cases during the past five years in which Ms. Ahern used a natural gas distribution group as well as a water utility proxy group for the purpose of estimating the cost of common equity for the regulated jurisdictional water utility. Also attached are copies of the direct testimonies and exhibit for each of the listed proceedings. *See* Attachments Hampton 4-4(b) through (kk).

Ms. Ahern stopped using a natural gas distribution proxy group in late 2010 after she conducted a relative risk analysis of the water utility, electric utility, combination electric & gas utility and natural gas distribution utility industries. Based upon the relative analysis she determined that the investment risk of water utilities has increased over the past 10 years or so and that water utilities face greater investment risk relative to electric, combination electric & gas and natural gas distribution utilities. Hence, the use of a natural gas distribution utility proxy group to determine the cost of common equity for a water utility is inappropriate because of water utilities' uniqueness compared with other types of utility companies as fully discussed on page 4, line 8 through page 14, line 8 of her Rebuttal Testimony.

Water Utility Cases in which Ms. Ahern used a Natural Gas Distirbution Group in Addition to a Water Utility Group from 2008 to date in 2013

21-Dec-2008	Aqua New Jersey, Inc.	New Jersey Board of Public Utilities	WR-07120955
5-Sep-2008	United Water New Jersey, Inc.	New Jersey Board of Public Utilities	WR-08090710
30-Sep-2008	United Water West Milford, Inc.	New Jersey Board of Public Utilities	WR08100928
30-Sep-2008	United Water Arlington Hills, Inc.	New Jersey Board of Public Utilities	WR08100929
26-Nov-2008	The Newtown Artesian Water Company	Pennsylvania Public Utility Commission	R-2008-2042293
19-Dec-2008	The Columbia Water Company	Pennsylvania Public Utility Commission	R-2008-2045157
26-Jan-2009	Tidewater Utilities, Inc.	Delaware Public Service Commission	09-29
13-Feb-2009	United Water Delaware, Inc.	Delaware Public Service Commission	09-60
5-Mar-2009	Water Service Corp. of Kentucky	Kentucky Public Service Commission	2008-00563
30-Apr-2009	Iowa-American Water Company	Iowa Utilities Board	RPU-2009-0004
1-May-2009	San Jose Water Company	California Public Utilities Commission	U-168-W
22-Jun-2009	Ohio-American Water Company	Public Utility Commission of Ohio	09-391-WS-AIR
30-Jun-2009	Utilities Inc., of Nevada	Public Service Commission of Nevada	09-06037
6-Aug-2009	Massanutten Public Service Corporation	Virginia State Corporation Commission	PUE-2009-00041
17-Aug-2009	Middlesex Water Company	New Jersey Board of Public Utilities	WR0908066
16-Sep-2009	United Water Pennsylvania, Inc.	Pennsylvania Public Utility Commission	R-2009-2122887
16-Sep-2009	Penn Estates Utiliites, Inc. (Water) / (Sewer)	Pennsylvania Public Utility Commission	R-2009-2117532 / R-2009-2117400
16-Sep-2009	Utilities, Inc. - Westgate	Pennsylvania Public Utility Commission	R-2009-2117389
16-Sep-2009	Utilites, Inc. of Pennsylvania	Pennsylvania Public Utility Commission	R-2009-2117402
25-Sep-2009	United Water New York, Inc.	New York State Public Service Commission	09-W-0731
30-Oct-2009	Missouri American Water Company	Missouri Public Service Commission	WR-2010-0131
18-Nov-2009	United Water Toms River, Inc.	New Jersey Board of Public Utilities	WR09110934
23-Nov-2009	United Water Westchester, Inc.	New York State Public Service Commission	09-W-0828
24-Nov-2009	United Water New Rochelle Inc.	New York State Public Service Commission	09-W-0824
9-Dec-2009	United Water New Jersey, Inc.	New Jersey Board of Public Utilities	WR09120987
18-Dec-2009	Aqua New Jersey, Inc.	New Jersey Board of Public Utilities	WR09121005
28-Dec-2009	Utilities Inc. of Central Nevada	Public Service Commission of Nevada	09-12017
6-Jan-2010	Connecticut Water Company	Connecticut Department of Public Utility Control	09-12-11
16-Feb-2010	United Utility Companies, Inc.	Public Service Commission of South Carolina	2009-479-W/S
2-Mar-2010	United Water Arkansas, Inc.	Arkansas Public Service Commission	09-130-U
15-Mar-2010	Aquarion Water Company	Connecticut Department of Public Utility Control	10-02-13
26-Mar-2010	Utility Center, Inc.	Indiana Utility Regulatory Commission	43874
26-Apr-2010	Tega Cay Water Service, Inc.	Public Service Commission of South Carolina	2009-473-WS
29-Sep-2010	United Water Connecticut	Connecticut Department of Public Utility Control	10-09-08
22-Oct-2010	United Water Great Gorge,Inc. / United Water Vernon Sewerage, Inc.	New Jersey Board of Public Utilities	WR10100785
25-Oct-2010	Carolilna Water Service, Inc. of NC	North Carolina Utility Commission	W-354. Sub 324
25-Oct-2010	Carolina Water Service, Inc. of NC - Ops. in Currituck Co.	North Carolina Utility Commission	W-354. Sub 327

AUS

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ELECTRIC COMPANIES

NATURAL GAS COMPANIES

WATER COMPANIES

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ELECTRIC COMPANIES

COMPANY	TOTAL REV $ MILL (1)	% REG ELEC REV	NET PLANT $ MILL	NET PLANT PER $ REV (1)	S&P BOND RATING	MOODY'S BOND RATING	COMMON EQUITY RATIO (3)	% RETURN ON BOOK VALUE: COMMON EQUITY (4)	% RETURN ON BOOK VALUE: TOTAL CAPITAL	REGULATION: ALLOWED ROE	REGULATION: ORDER DATE
ALLETE, Inc. (NYSE-ALE)	944.4	90	2,239.9	2.37	A-	A2	53.3	7.9	6.4	10.38	11/10
American Electric Power Co. (NYSE-AEP)	14,776.0	94	38,133.0	2.58	BBB	Baa2	45.4	10.3	7.4	10.63	-
Cleco Corporation (NYSE-CNL)	999.4	95	2,974.3	2.98	BBB	Baa2	53.1	11.8	8.1	10.70	10/09
Edison International (NYSE-EIX)	12,997.0	87	33,858.0	2.61	BBB+	A1	37.5	NM	2.0	10.63	-
El Paso Electric Company (NYSE-EE)	855.7	100	2,046.4	2.39	BBB	Baa2	47.7	11.1	8.3	11.25	-
FirstEnergy Corporation (ASE-FE)	16,161.0	52	31,441.0	1.95	BBB	Baa2	41.8	8.0	6.3	10.52	-
Great Plains Energy Incorporated (NYSE-GXP)	2,315.8	100	7,270.3	3.14	BBB/BBB-	Baa1/Baa2	47.6	6.2	6.2	10.12	-
Hawaiian Electric Industries, Inc. (NYSE-HE)	3,387.9	92	3,506.5	1.04	BBB-	Baa2	47.8	10.1	7.2	10.00	-
IDACORP, Inc. (NYSE-IDA)	1,060.5	100	3,506.8	3.31	A-	A2	52.6	9.4	7.3	10.18	05/09
Nextera Energy (NYSE-NEE)	14,746.0	69	47,693.0	3.23	A	Aa3	37.6	13.9	8.0	10.50	03/10
Otter Tail Corporation (NDQ-OTTR)	1,002.2	34	1,057.9	1.06	BBB-/BB+	Baa2	54.9	NM	2.5	10.75	-
Pinnacle West Capital Corp. (NYSE-PNW)	3,276.6	100	10,071.8	3.07	BBB+	Baa1	53.3	9.3	7.6	11.00	12/09
PNM Resources, Inc. (NYSE-PNM)	1,367.5	98	3,691.7	2.70	BBB	Baa1/Baa2	46.5	12.9	9.4	10.22	-
Portland General Electric Company (NYSE-POR)	1,821.0	100	4,351.0	2.39	A-	A3	49.7	8.4	7.3	10.00	12/10
Southern Company (NYSE-SO)	16,530.0	91	47,274.0	2.86	A	A2/A3	48.7	11.8	7.5	11.46	-
Westar Energy, Inc. (NYSE-WR)	2,223.9	100	7,181.2	3.23	BBB+	A3	46.5	9.0	7.1	10.20	12/05
AVERAGE							47.7	10.0	6.8	10.53	

COMBINATION ELECTRIC & GAS COMPANIES

COMPANY	TOTAL REV $ MILL (1)	% REG ELEC REV	% REG GAS REV	NET PLANT $ MILL	NET PLANT PER $ REV (1)	S&P BOND RATING	MOODY'S BOND RATING	COMMON EQUITY RATIO (3)	% RETURN ON BOOK VALUE: COMMON EQUITY (4)	% RETURN ON BOOK VALUE: TOTAL CAPITAL	REGULATION: ALLOWED ROE	REGULATION: ORDER DATE
Alliant Energy Corporation (NYSE-LNT)	3,222.8	81	12	7,384.6	2.29	A-	A2/A3	51.2	9.6	7.7	10.34	-
Ameren Corporation (NYSE-AEE)	6,897.0	87	13	17,833.0	2.59	BBB/BBB-	Baa1/Baa2	52.4	2.6	4.3	9.59	-
Avista Corporation (NYSE-AVA)	1,575.4	61	31	2,940.5	1.87	A-	A3	46.3	7.2	6.2	10.33	-
Black Hills Corporation (NYSE-BKH)	1,194.3	52	39	2,696.4	2.26	BBB+	A3	44.8	6.6	6.4	10.72	-
CenterPoint Energy (NYSE-CNP)	7,459.0	33	44	13,337.0	1.79	BBB+	Baa1/Baa2	30.1	9.5	7.1	10.05	-
CH Energy Group, Inc. (NYSE-CHG)	920.5	56	15	1,181.1	1.28	A	A3	50.4	7.8	7.0	10.00	06/09
Chesapeake Utilities Corporation (NYSE-CPK)	387.0	24	39	523.2	1.35	NR	NR	62.9	11.1	9.1	10.50	-
CMS Energy Corporation (NYSE-CMS)	6,203.0	64	32	11,190.0	1.80	BBB/BBB-	Baa2	30.1	11.4	7.1	10.30	-
Consolidated Edison, Inc. (NYSE-ED)	12,253.0	72	13	26,225.0	2.14	A-	A3/Baa1	51.6	9.5	7.6	9.93	-
Dominion Resources, Inc. (NYSE-D)	13,134.0	53	12	31,523.0	2.40	A	Baa1	36.0	9.9	6.3	10.52	-
DTE Energy Company (NYSE-DTE)	8,653.0	60	16	14,404.0	1.66	A	A2	48.4	9.5	7.5	10.75	-
Duke Energy Corporation (NYSE-DUK)	17,297.0	77	3	69,031.0	3.99	A-	A3	50.8	5.1	4.4	10.57	-
Empire District Electric Co. (NYSE-EDE)	560.7	92	7	1,632.5	2.91	BBB+	A3	50.8	7.8	6.9	NM	-
Entergy Corporation (NYSE-ETR)	10,354.9	77	1	26,431.5	2.55	BBB	Baa2	41.3	7.7	6.0	10.62	-
Exelon Corporation (NYSE-EXC)	21,196.0	46	4	43,914.0	2.07	BBB+/BBB	Baa1	52.4	7.6	6.4	9.71	-
Integrys Energy Group (NYSE-TEG)	4,152.9	31	40	5,473.0	1.32	A-	A2/A3	54.5	8.3	6.9	10.11	-
MDU Resources Group, Inc. (NYSE-MDU)	4,060.0	6	22	4,582.9	1.13	BBB+	NR	60.7	4.4	4.7	10.63	-
MGE Energy, Inc. (NYSE-MGEE)	535.3	73	26	1,043.3	1.95	AA-	A1	61.5	11.2	9.0	10.30	1/11
NiSource Inc. (NYSE-NI)	5,170.8	28	77	12,542.7	2.43	BBB-	Baa2	40.7	5.8	5.6	10.72	-
Northeast Utilities (NYSE-NU)	5,657.9	85	8	16,303.8	2.88	A-	A3	50.6	7.0	5.6	9.38	-
NorthWestern Corporation (NYSE-NWE)	1,070.3	75	25	2,435.6	2.28	A-	A2	43.5	11.0	7.9	10.90	-
NV Energy, Inc. (NYSE-NVE)	2,988.2	96	4	9,381.6	3.14	BBB	Baa1	41.7	7.9	6.8	10.58	-
OGE Energy Corp. (NYSE-OGE)	3,694.3	57	12	8,097.8	2.19	BBB	Baa1	43.7	13.3	8.7	9.98	-
Pepco Holdings, Inc. (NYSE-POM)	5,181.0	80	4	8,600.0	1.66	A-/BBB+	Baa1/Baa2	45.1	5.9	5.5	9.90	-
PG&E Corporation (NYSE-PCG)	15,025.0	79	21	35,650.0	2.37	BBB/BBB-	A3/Baa1	49.2	7.3	6.3	10.40	03/07
PPL Corporation (NYSE-PPL)	13,282.0	48	2	29,047.0	2.19	A-	A3	36.4	14.7	8.5	10.35	-
Public Service Enterprise Group (NYSE-PEG)	10,011.0	44	22	19,103.0	1.91	BBB+/BBB	A1	57.2	13.5	9.7	10.30	-
SCANA Corporation (NYSE-SCG)	4,088.0	58	20	10,597.0	2.59	BBB+	Baa1/Baa2	42.5	10.4	7.5	10.72	-
SEMPRA Energy (NYSE-SRE)	9,580.0	33	43	24,990.0	2.61	A/A-	A2	43.5	8.8	6.1	11.08	-
TECO Energy, Inc. (NYSE-TE)	3,127.2	63	13	5,936.0	1.90	BBB+	A3	42.3	9.7	8.6	11.00	-
UGI Corporation (NYSE-UGI)	6,519.2	1	14	4,233.1	0.65	NR	A3	31.9	9.5	7.3	NM	-
UIL Holdings Corporation (NYSE-UIL)	1,439.6	54	45	2,714.4	1.89	BBB	Baa2	38.0	8.7	6.6	8.75	02/09
Unitil Corporation (ASE-UTL)	353.1	53	45	601.2	1.70	NR	NR	43.6	8.0	6.2	9.44	-
UNS Energy Corp. (NYSE-UNS)	1,467.4	87	9	3,260.5	2.22	BBB-	Baa2	36.6	9.3	6.9	9.92	-
Vectren Corporation (NYSE-VVC)	2,216.1	27	33	3,111.1	1.40	A/A-	A2	44.2	11.0	7.7	10.43	-
Wisconsin Energy Corporation (NYSE-WEC)	4,288.4	75	22	10,438.8	2.43	A-/BBB+	A2/A3	45.0	13.8	8.7	10.43	-
Xcel Energy Inc. (NYSE-XEL)	10,145.5	84	15	23,401.6	2.31	A-	A3	44.0	10.5	7.9	10.70	-
AVERAGE								45.8	9.0	7.0	10.28	
COMBINED ELECTRIC/COMBINATION ELECTRIC & GAS AVERAGES								47	9.5	6.9	10.41	

NATURAL GAS DISTRIBUTION & INTEGRATED NAT. GAS COMPANIES

COMPANY	TOTAL REV $ MILL (1)	% REG GAS REV	NET PLANT $ MILL	NET PLANT PER $ REV (1)	S&P BOND RATING	MOODY'S BOND RATING	COMMON EQUITY RATIO (3)	%RETURN ON BOOK VALUE: COMMON EQUITY (4)	%RETURN ON BOOK VALUE: TOTAL CAPITAL	REGULATION: ALLOWED ROE	REGULATION: ORDER DATE
AGL Resources Inc. (NYSE-GAS)	3,922.0	69	8,347.0	2.13	A-	A1/A2	40.8	8.1	5.5	10.17	03/09
Atmos Energy Corporation (NYSE-ATO)	3,371.5	71	5,595.3	1.66	BBB+	Baa1	46.5	9.6	6.7	11.72	-
Delta Natural Gas Company (NDQ-DGAS)	72.2	65	134.6	1.86	NR	NR	54.5	10.9	7.5	10.40	10/10
Energen Corporation (NYSE-EGN)	1,472.3	30	5,308.0	3.61	BBB	A3/Baa1	61.6	8.0	7.0	13.40	06/02
Energy Transfer Equity (NYSE-ETE)	8,015.2	44	22,237.1	2.77	NR	Ba1	28.6	3.9	4.6	9.73	-
EQT Corporation (NYSE-EQT)	1,650.4	20	7,492.4	4.54	BBB	Baa2	54.2	6.5	6.4	11.00	-
Gas Natural, Inc. (NDQ-EGAS)	89.3	87	107.9	1.21	NR	NR	55.5	3.3	3.2	12.63	-
Laclede Group, Inc. (NYSE-LG)	1,021.6	75	1,037.9	1.02	A	A2	58.1	10.4	8.2	NM	10/05
National Fuel Gas Company (NYSE-NFG)	1,647.3	54	4,856.2	2.95	BBB	Baa1	55.2	11.5	9.1	9.50	-
New Jersey Resources Corp. (NYSE-NJR)	2,342.5	28	1,526.3	0.65	A+	Aa3	48.1	11.4	7.0	10.30	10/08
Northwest Natural Gas Co. (NYSE-NWN)	785.0	48	1,957.2	2.49	A+	A1	46.7	8.6	6.8	9.50	-
ONEOK, Inc. (NYSE-OKE)	12,801.9	16	9,490.4	0.74	BBB	Baa2	18.2	17.1	6.2	10.50	-
Piedmont Natural Gas Co., Inc. (NYSE-PNY)	1,122.8	100	3,105.1	2.77	A	A3	43.4	11.8	5.3	10.40	-
Questar Corporation (NYSE-STR)	1,110.7	92	3,261.2	2.94	A	A3	45.3	19.7	11.7	10.00	08/08
RGC Resources, Inc. (NDQ-RGCO)	59.0	99	92.0	1.56	NR	NR	61.8	8.2	7.6	9.85	-
South Jersey Industries, Inc. (NYSE-SJI)	707.3	67	1,463.0	2.07	A	A2	43.4	16.0	8.8	10.30	9/10
Southwest Gas Corporation (NYSE-SWX)	1,956.9	70	3,299.6	1.69	BBB+	Baa1	50.1	10.3	8.0	10.12	-
WGL Holdings, Inc. (NYSE-WGL)	2,384.3	46	2,701.1	1.13	A+	A2	57.1	11.2	8.1	9.85	-
AVERAGE							48.3	10.4	7.1	10.55	

WATER COMPANIES

COMPANY	TOTAL REV $ MILL (1)	% REG WATER REV	NET PLANT $ MILL	NET PLANT PER $ REV (1)	S&P BOND RATING	MOODY'S BOND RATING	COMMON EQUITY RATIO (3)	%RETURN ON BOOK VALUE: COMMON EQUITY (4)	%RETURN ON BOOK VALUE: TOTAL CAPITAL	REGULATION: ALLOWED ROE	REGULATION: ORDER DATE
American States Water Co. (NYSE-AWR)	449.7	68	912.0	2.03	A+	A2	56.6	11.8	9.5	9.99	11/11
American Water Works Co., Inc. (NYSE-AWK)	2,819.7	89	11,380.3	4.04	A	Baa1	44.5	9.9	7.8	9.61	-
Aqua America, Inc. (NYSE-WTR)	755.7	96	3,863.4	5.11	AA-	NR	44.2	13.0	7.3	10.33	-
Artesian Resources Corp. (NDQ-ARTNA)	69.7	91	362.6	5.20	NR	NR	49.5	8.7	7.3	10.00	09/09
California Water Service Group (NYSE-CWT)	541.5	100	1,443.1	2.67	AA-	NR	46.5	9.8	7.4	9.99	11/11
Connecticut Water Service, Inc. (NDQ-CTWS)	79.8	100	422.6	5.30	A	NR	37.5	11.2	7.1	9.75	07/10
Middlesex Water Company (NDQ-MSEX)	106.6	89	433.3	4.06	A	NR	51.8	7.5	5.9	10.15	-
SJW Corporation (NYSE-SJW)	261.4	96	870.5	3.33	A	NR	44.3	8.6	7.1	9.99	11/11
York Water Company (NDQ-YORW)	41.1	100	238.5	5.80	A-	NR	53.7	9.4	7.9	NM	10/08
AVERAGE							47.6	10.0	7.5	9.98	

Regulatory Research Associates
REGULATORY FOCUS

October 4, 2012

MAJOR RATE CASE DECISIONS--JANUARY-SEPTEMBER 2012

The average return on equity (ROE) authorized electric utilities in the first nine months of 2012 was 10.22% (33 observations), equal to the average in calendar-2011. We note that the 2012 data includes several surcharge/rider generation cases in Virginia that incorporate ROE premiums. Virginia statutes authorize the State Corporation Commission to approve ROE premiums of up to 200 basis points for certain generation projects (see the Virginia Commission Profile). Excluding these Virginia surcharge/rider generation cases from the data, the average authorized electric ROE was 9.97% for the first nine months of 2012. The average ROE authorized gas utilities for the first three quarters of 2012 was 9.75% (14 observations), slightly lower than the 9.92% average in calendar-2011. We note that this report utilizes the simple mean for the return averages.

After reaching a low in the early-2000s, the number of rate case decisions for energy companies generally increased over the ensuing years. In 2001, there were 32 electric and gas rate decisions, versus 95 in 2009, 126 in 2010, and 84 in 2011. And, we are estimating that roughly 100 electric and gas rate cases will be decided in 2012. Increased costs, including environmental compliance expenditures, the need for generation and delivery infrastructure upgrades and expansion, renewable generation mandates, and higher employee benefit expenses argue for the continuation of an active rate case schedule over the next few years.

As a result of electric industry restructuring, certain states unbundled electric rates and implemented retail competition for generation. Commissions in those states now have jurisdiction over the revenue requirement and return parameters for delivery operations only (which we footnote in our chronology beginning on page 4), thus complicating historical data comparability. We also note that while the heightened business risk associated with the sluggish economy may have increased corporate capital costs, average authorized ROEs have declined slightly since 2008. In fact, some state commissions have cited the lethargic economy and customer hardship as factors influencing their equity return authorizations. In addition, the Federal Reserve's recently announced "quantitative easing 3" may exert modest downward pressure on interest rates in the short-to-intermediate term.

The table on page 2 shows the average ROE authorized in major electric and gas rate decisions annually since 1990, and by quarter since 2006, followed by the number of observations in each period. The tables on page 3 show the composite electric and gas industry data for all major cases summarized annually since 1998 and by quarter for the past seven quarters. The individual electric and gas cases decided in the first nine months of 2012 are listed on pages 4-7, with the decision date shown first, followed by the company name, the abbreviation for the state issuing the decision, the authorized rate of return (ROR), return on equity (ROE), and percentage of common equity in the adopted capital structure. Next we show the month and year in which the adopted test year ended, whether the commission utilized an average or a year-end rate base, and the amount of the permanent rate change authorized. The dollar amounts represent the permanent rate change ordered at the time decisions were rendered. Fuel adjustment clause rate changes are not reflected in this study. We note that the cases and averages included in this study may be slightly different from those in our on-line Rate Case History database, with any differences reflecting, for example, this study's historical inclusion (pre-2011) of ROE determinations that are rendered in cost-of-capital-only proceedings in California.

Dennis Sperduto

2.

RRA

Average Equity Returns Authorized January 1990 - September 2012

Year	Period	Electric Utilities ROE %	Electric Utilities (# Cases)	Gas Utilities ROE %	Gas Utilities (# Cases)
1990	Full Year	12.70	(44)	12.67	(31)
1991	Full Year	12.55	(45)	12.46	(35)
1992	Full Year	12.09	(48)	12.01	(29)
1993	Full Year	11.41	(32)	11.35	(45)
1994	Full Year	11.34	(31)	11.35	(28)
1995	Full Year	11.55	(33)	11.43	(16)
1996	Full Year	11.39	(22)	11.19	(20)
1997	Full Year	11.40	(11)	11.29	(13)
1998	Full Year	11.66	(10)	11.51	(10)
1999	Full Year	10.77	(20)	10.66	(9)
2000	Full Year	11.43	(12)	11.39	(12)
2001	Full Year	11.09	(18)	10.95	(7)
2002	Full Year	11.16	(22)	11.03	(21)
2003	Full Year	10.97	(22)	10.99	(25)
2004	Full Year	10.75	(19)	10.59	(20)
2005	Full Year	10.54	(29)	10.46	(26)
	1st Quarter	10.38	(3)	10.63	(6)
	2nd Quarter	10.68	(6)	10.50	(2)
	3rd Quarter	10.06	(7)	10.45	(3)
	4th Quarter	10.39	(10)	10.14	(5)
2006	**Full Year**	**10.36**	(26)	**10.43**	(16)
	1st Quarter	10.27	(8)	10.44	(10)
	2nd Quarter	10.27	(11)	10.12	(4)
	3rd Quarter	10.02	(4)	10.03	(8)
	4th Quarter	10.56	(16)	10.27	(15)
2007	**Full Year**	**10.36**	(39)	**10.24**	(37)
	1st Quarter	10.45	(10)	10.38	(7)
	2nd Quarter	10.57	(8)	10.17	(3)
	3rd Quarter	10.47	(11)	10.49	(7)
	4th Quarter	10.33	(8)	10.34	(13)
2008	**Full Year**	**10.46**	(37)	**10.37**	(30)
	1st Quarter	10.29	(9)	10.24	(4)
	2nd Quarter	10.55	(10)	10.11	(8)
	3rd Quarter	10.46	(3)	9.88	(2)
	4th Quarter	10.54	(17)	10.27	(15)
2009	**Full Year**	**10.48**	(39)	**10.19**	(29)
	1st Quarter	10.66	(17)	10.24	(9)
	2nd Quarter	10.08	(14)	9.99	(11)
	3rd Quarter	10.26	(11)	9.93	(4)
	4th Quarter	10.30	(17)	10.09	(12)
2010	**Full Year**	**10.34**	(59)	**10.08**	(37)
	1st Quarter	10.32	(13)	10.10	(5)
	2nd Quarter	10.12	(10)	9.88	(5)
	3rd Quarter	10.00	(7)	9.65	(2)
	4th Quarter	10.34	(11)	9.88	(4)
2011	**Full Year**	**10.22**	(41)	**9.92**	(16)
	1st Quarter	10.84	(12)	9.63	(5)
	2nd Quarter	9.92	(13)	9.83	(8)
	3rd Quarter	9.78	(8)	9.75	(1)
2012	**Year-To-Date**	**10.22**	**(33)**	**9.75**	**(14)**

AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-11

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at page 17, lines 4-8, where she states "it is not necessary to evaluate any growth proxy except security analysts' forecasts of EPS growth..." Please indicate if Ms. Ahern believes that all investors rely exclusively on analysts' forecasts of EPS in making investment decisions.

Response: Ms. Ahern has not stated that she "believes" that all investors rely exclusively on analysts' forecasts of earnings per share (EPS) in making investment decisions. Her opinion, as she states on page 17, lines 4-8 of her Rebuttal Testimony is that "it is not necessary to evaluate any growth proxy except security analysts' forecasts of EPS growth because security analysts' forecasts take into account historical information as well as all current information likely to impact the future, which is critical since both cost of capital and ratemaking are prospective." In addition, it is Ms. Ahern's opinion that security analysts' forecasts of EPS growth rates are the best predictor of growth in market price compared with other accounting measures of growth, such as growth in dividends per share (DPS) and book value per share (BVPS). Ms. Ahern's opinion is based upon her experience as a rate of return expert (see Appendix A to her Rebuttal Testimony), her certification as a Certified Rate of Return Analyst (CRRA) as well as her discussion of the superiority of security analysts' forecasted growth in EPS on page 17, line1 through page 19, line 14 of her Rebuttal Testimony as well as Attachment PMA-2. Please also see Attachment Hampton 4-11 (a) which is a copy of the speech, The Pricing of Common Stocks cited in lines 18-29 on page 17 and Attachment Hampton 4-11 (b) which contains the Morin citation from lines 3-29 on page 18 of Ms. Ahern's Rebuttal Testimony.

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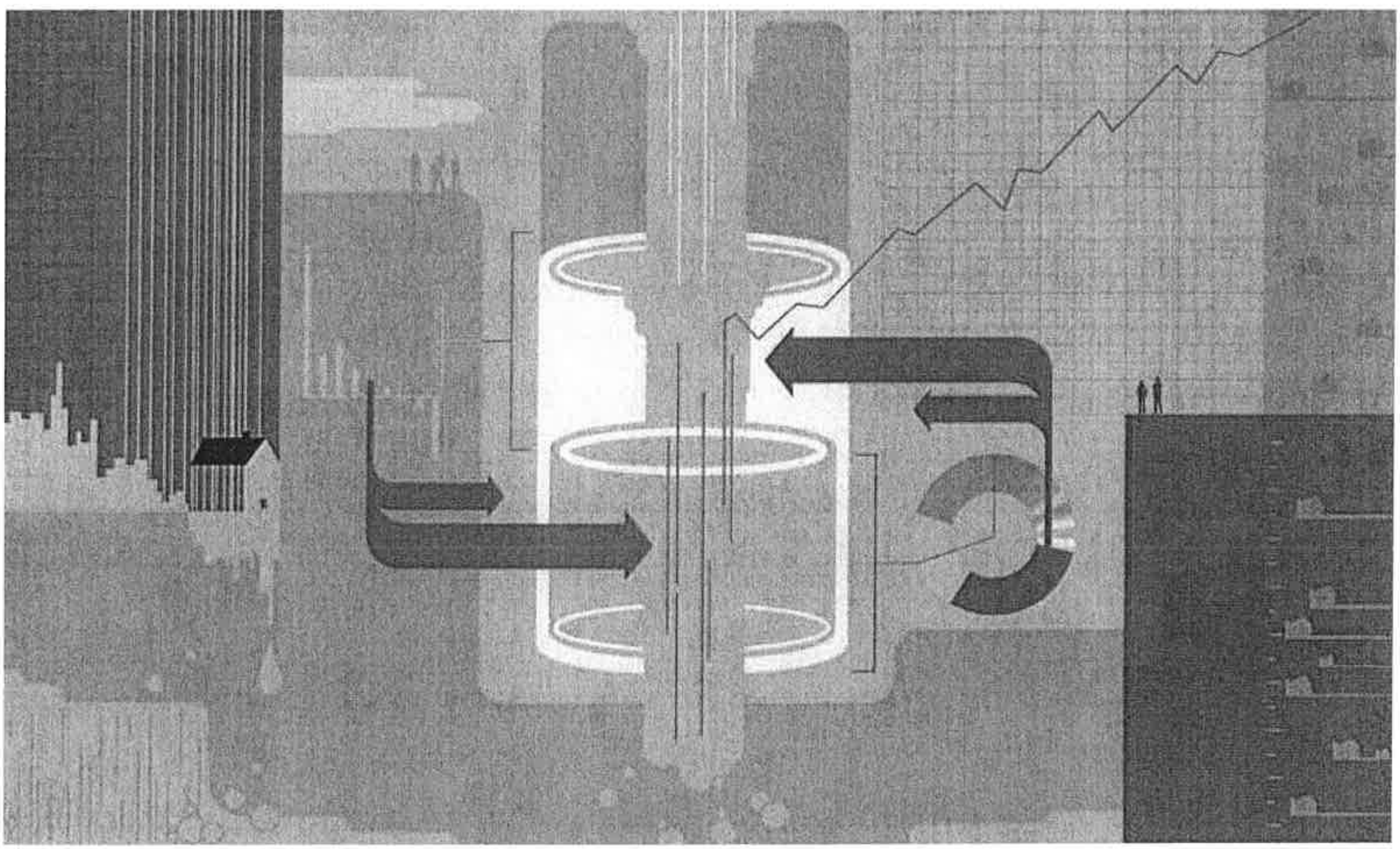
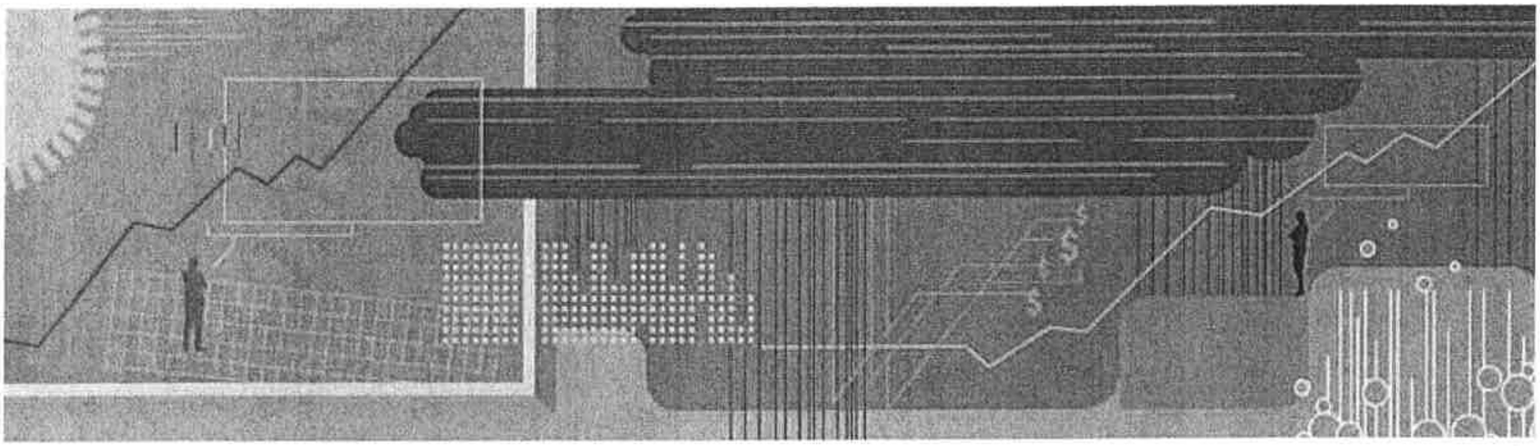
McKinsey on Finance

Number 35,
Spring 2010

Perspectives on Corporate Finance and Strategy





Equity analysts: Still too bullish

After almost a decade of stricter regulation, analysts' earnings forecasts continue to be excessively optimistic.

Marc H. Goedhart, Rishi Raj, and Abhishek Saxena

No executive would dispute that analysts' forecasts serve as an important benchmark of the current and future health of companies. To better understand their accuracy, we undertook research nearly a decade ago that produced sobering results. Analysts, we found, were typically overoptimistic, slow to revise their forecasts to reflect new economic conditions, and prone to making increasingly inaccurate forecasts when economic growth declined.[1]

Alas, a recently completed update of our work only reinforces this view—despite a series of rules and regulations, dating to the last decade, that were intended to improve the quality of the analysts' long-term earnings forecasts, restore investor confidence in them, and prevent conflicts of interest.[2] For executives, many of whom go to great lengths to satisfy Wall Street's expectations in their financial reporting and long-term strategic moves, this is a cautionary tale worth remembering.

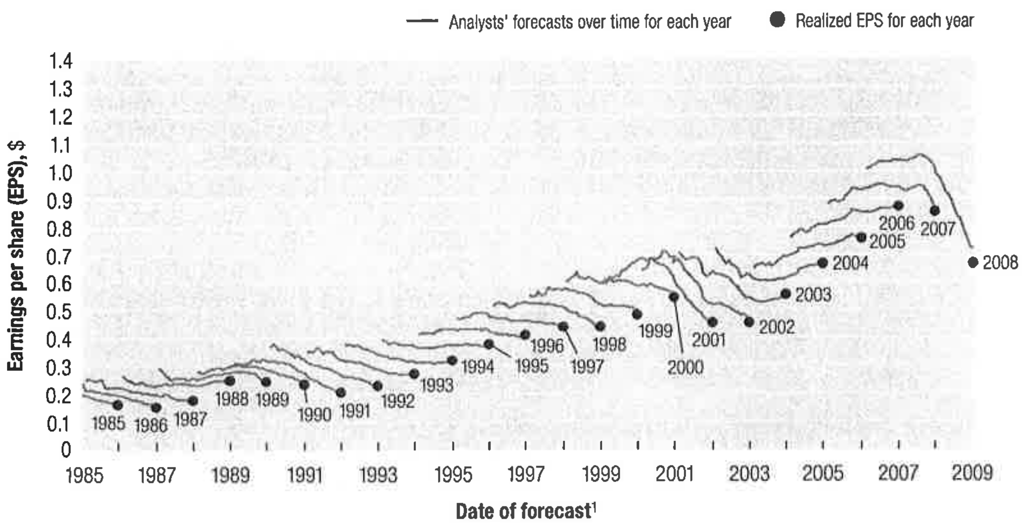
Exceptions to the long pattern of excessively optimistic forecasts are rare, as a progression of consensus earnings estimates for the S&P 500 shows (Exhibit 1). Only in years such as 2003 to 2006, when strong economic growth generated actual earnings that caught up with earlier predictions, do forecasts actually hit the mark.

Exhibit 1

Off the mark

With few exceptions, aggregate earnings forecasts exceed realized earnings per share.

S&P 500 companies



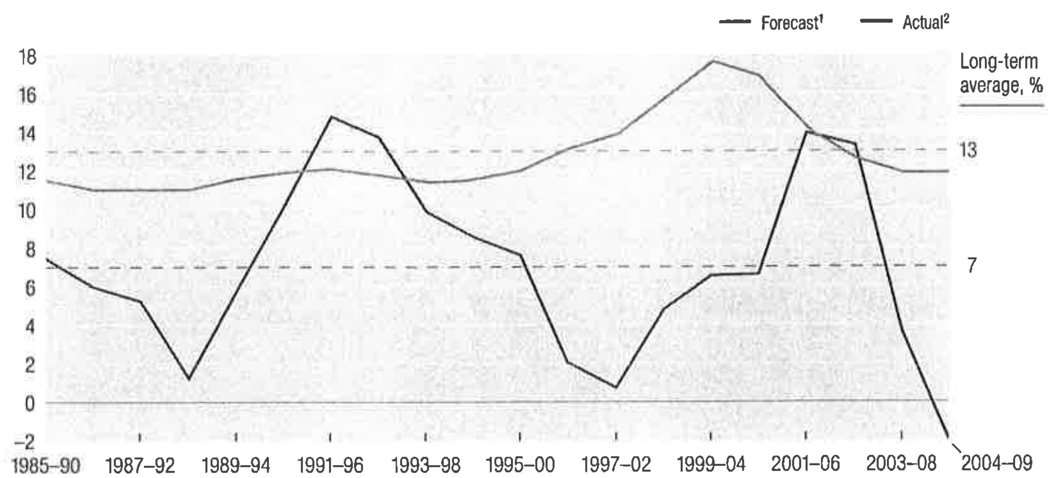
[1] Monthly forecasts.
Source: Thomson Reuters I/B/E/S Global Aggregates; McKinsey analysis

Exhibit 2

Overoptimistic

Actual growth surpassed forecasts only twice in 25 years—both times during the recovery following a recession.

Earnings growth for S&P 500 companies, 5-year rolling average, %



[1] Analysts' 5-year forecasts for long-term consensus earnings-per-share (EPS) growth rate. Our conclusions are same for growth based on year-over-year earnings estimates for 3 years.
[2] Actual compound annual growth rate (CAGR) of EPS; 2009 data are not yet available, figures represent consensus estimate as of Nov 2009.
Source: Thomson Reuters I/B/E/S Global Aggregates; McKinsey analysis

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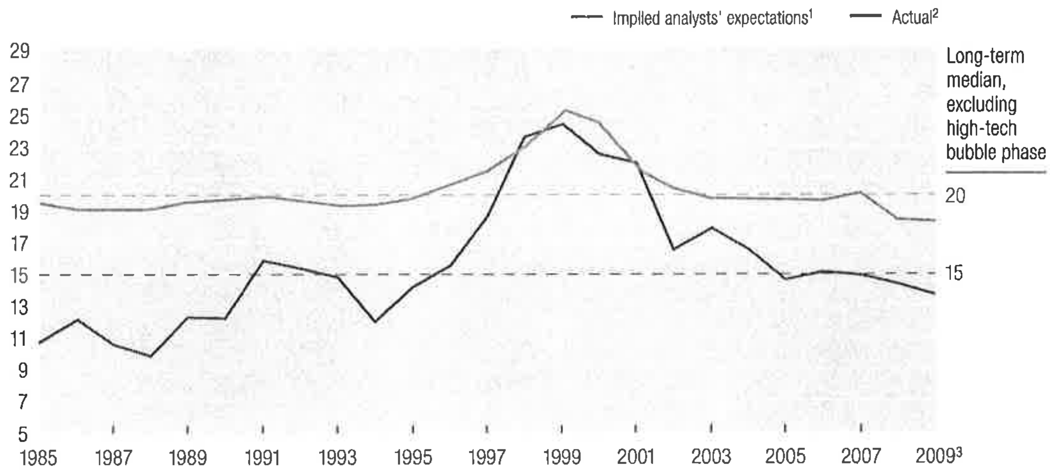
Exhibit 3

Less giddy

Capital market expectations are more reasonable.

Actual P/E ratio vs P/E ratio implied by analysts' forecasts, S&P 500 composite index



[1]P/E ratio based on 1-year-forward earnings-per-share (EPS) estimate and estimated value of S&P 500. Estimated value assumes: for first 5 years, EPS growth rate matches analysts' estimates then drops smoothly over next 10 years to long-term continuing-value growth rate; continuing value based on growth rate of 6%; return on equity is 13.5% (long-term historical median for S&P 500), and cost of equity is 9.5% in all periods.
[2]Observed P/E ratio based on S&P 500 value and 1-year-forward EPS estimate.
[3]Based on data as of Nov 2009.

Source: Thomson Reuters I/B/E/S Global Aggregates; McKinsey analysis

This pattern confirms our earlier findings that analysts typically lag behind events in revising their forecasts to reflect new economic conditions. When economic growth accelerates, the size of the forecast error declines; when economic growth slows, it increases.[3] So as economic growth cycles up and down, the actual earnings S&P 500 companies report occasionally coincide with the analysts' forecasts, as they did, for example, in 1988, from 1994 to 1997, and from 2003 to 2006.

Moreover, analysts have been persistently overoptimistic for the past 25 years, with estimates ranging from 10 to 12 percent a year,[4] compared with actual earnings growth of 6 percent.[5] Over this time frame, actual earnings growth surpassed forecasts in only two instances, both during the earnings recovery following a recession (Exhibit 2). On average, analysts' forecasts have been almost 100 percent too high.[6]

Capital markets, on the other hand, are notably less giddy in their predictions. Except during the market bubble of 1999–2001, actual price-to-earnings ratios have been 25 percent lower than implied P/E ratios based on analyst forecasts (Exhibit 3). What's more, an actual forward P/E ratio[7] of the S&P 500 as of November 11, 2009—14—is consistent with long-term earnings growth of 5 percent.[8] This assessment is more

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reasonable, considering that long-term earnings growth for the market as a whole is unlikely to differ significantly from growth in GDP,[9] as prior McKinsey research has shown.[10] Executives, as the evidence indicates, ought to base their strategic decisions on what they see happening in their industries rather than respond to the pressures of forecasts, since even the market doesn't expect them to do so. o

[1] Marc H. Goedhart, Brendan Russell, and Zane D. Williams, "Prophets and profits," mckinseyquarterly.com, October 2001.

[2] US Securities and Exchange Commission (SEC) Regulation Fair Disclosure (FD), passed in 2000, prohibits the selective disclosure of material information to some people but not others. The Sarbanes–Oxley Act of 2002 includes provisions specifically intended to help restore investor confidence in the reporting of securities' analysts, including a code of conduct for them and a requirement to disclose knowable conflicts of interest. The Global Settlement of 2003 between regulators and ten of the largest US investment firms aimed to prevent conflicts of interest between their analyst and investment businesses.

[3] The correlation between the absolute size of the error in forecast earnings growth (S&P 500) and GDP growth is –0.55.

[4] Our analysis of the distribution of five-year earnings growth (as of March 2005) suggests that analysts forecast growth of more than 10 percent for 70 percent of S&P 500 companies.

[5] Except 1998–2001, when the growth outlook became excessively optimistic.

[6] We also analyzed trends for three-year earnings-growth estimates based on year-on-year earnings estimates provided by the analysts, where the sample size of analysts' coverage is bigger. Our conclusions on the trend and the gap vis-à-vis actual earnings growth does not change.

[7] Market-weighted and forward-looking earnings-per-share (EPS) estimate for 2010.

[8] Assuming a return on equity (ROE) of 13.5 percent (the long-term historical average) and a cost of equity of 9.5 percent—the long-term real cost of equity (7 percent) and inflation (2.5 percent).

[9] Real GDP has averaged 3 to 4 percent over past seven or eight decades, which would indeed be consistent with nominal growth of 5 to 7 percent given current inflation of 2 to 3 percent.

[10] Timothy Koller and Zane D. Williams, "What happened to the bull market?" mckinseyquarterly.com, November 2001.

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AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-12

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at page 18, line 36 through page 19, line 1, citing "empirical evidence." Please identify any empirical evidence that Ms. Ahern is aware of that maintains that all investors rely exclusively on analysts' forecasts of EPS in making investment decisions.

Response: Ms. Ahern is not aware of any empirical studies which show that investors rely exclusively on any particular measure of growth, be it security analysts' forecasted growth in earning per share (EPS) or Value Line Investment Survey's projected growth in dividends per share (DPS) or book value per share (BVPS), or even historical measure of growth in EPS, DPS and BVPS and other accounting measures of growth. However, as indicated on page 17, line 16 through page 19, line 15, Ms. Ahern is aware of studies which confirm that analysts' forecasts of growth in EPS are the best predictor of growth in market price. Please see Ms. Ahern's response to Request No. Hampton 4-11.

AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-13

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at page 18, line 36 through page 19, line 1, citing "empirical evidence." Please indicate if Ms. Ahern is aware of any empirical evidence that maintains that investors rely on factors other than analysts' forecasts of EPS in making investment decisions.

Response: Please see Ms. Ahern's response to Request Nos. Hampton 4-11 and 4-12.

U.S. Securities and Exchange Commission

Analyzing Analyst Recommendations

Research analysts study publicly traded companies and make recommendations on the securities of those companies. Most specialize in a particular industry or sector of the economy. They exert considerable influence in today's marketplace. Analysts' recommendations or reports can influence the price of a company's stock—especially when the recommendations are widely disseminated through television appearances or through other electronic and print media. The mere mention of a company by a popular analyst can temporarily cause its stock to rise or fall—even when nothing about the company's prospects or fundamentals has recently changed.

Analysts often use a variety of terms—buy, strong buy, near-term or long-term accumulate, near-term or long-term over-perform or under-perform, neutral, hold—to describe their recommendations. But the meanings of these terms can differ from firm to firm. Rather than make assumptions, investors should carefully read the definitions of all ratings used in each research report. They should also consider the firm's disclosures regarding what percentage of all ratings fall into either "buy," "hold/neutral," and "sell" categories.

While analysts provide an important source of information in today's markets, investors should understand the potential conflicts of interest analysts might face. For example, some analysts work for firms that underwrite or own the securities of the companies the analysts cover. Analysts themselves sometimes own stocks in the companies they cover—either directly or indirectly, such as through employee stock-purchase pools in which they and their colleagues participate.

As a general matter, investors should not rely solely on an analyst's recommendation when deciding whether to buy, hold, or sell a stock. Instead, they should also do their own research—such as reading the prospectus for new companies or for public companies, the quarterly and annual reports filed with the SEC—to confirm whether a particular investment is appropriate for them in light of their individual financial circumstances. This alert discusses the potential conflicts of interest analysts face, describes the New York Stock Exchange (NYSE) and FINRA rules concerning analyst recommendations, and provides tips for researching investments.

Who Analysts Are and Who They Work for

Analysts historically have served an important role, promoting the efficiency of our markets by ferreting out facts and offering valuable insights on companies and industry trends. Analysts generally fall into one of three categories:

Sell-side analysts typically work for full-service broker-dealers and make recommendations on the securities they cover. Many of the more popular sell-side analysts work for prominent brokerage firms that also provide investment banking services for corporate clients—including companies whose securities the analysts cover.

Buy-side analysts typically work for institutional money managers—such as mutual funds, hedge funds, or investment advisers—that purchase securities for their own accounts. They counsel their employers on which securities to buy, hold, or sell and stand to make money when they make good calls.

Independent analysts typically aren't associated with firms that underwrite the securities they cover. They often sell their research reports on a subscription or other basis. Some firms that have discontinued their investment banking operations now market themselves as more independent than multi-service firms, emphasizing their lack of conflicts of interest.

Potential Conflicts of Interest

Many analysts work in a world with built-in conflicts of interest and competing pressures. On the one hand, sell-side firms want their individual investor clients to be successful over time because satisfied long-term investors are a key to a firm's long-term reputation and success. A well-respected investment research team is an important service to customers.

At the same time, however, several factors can create pressure on an analyst's independence and objectivity. The existence of these factors does not necessarily mean that the research analyst is biased. But investors should take them into account before making an investment decision. Some of these factors include:

- **Investment Banking Relationships**—When companies issue new securities, they hire investment bankers for advice on structuring the deal and for help with the actual offering. Underwriting a company's securities offerings and providing other investment banking services can bring in more money for firms than revenues from brokerage operations or research reports. Here's what an investment banking relationship may mean:

    1. **The analyst's firm may be underwriting the offering**—If so, the firm has a substantial interest—both financial and with respect to its reputation—in assuring that the offering is successful. Analysts are often an integral part of the investment banking team for initial public offerings—assisting with "due diligence" research into the company, participating in investor road shows, and helping to shape the deal. Upbeat research reports and positive recommendations published after the offering is completed may "support" new stock issued by a firm's investment banking clients.

    2. **Client companies prefer favorable research reports—** Unfavorable analyst reports may hurt the firm's efforts to

nurture a lucrative, long-term investment banking relationship. An unfavorable report might alienate the firm's client or a potential client and could cause a company to look elsewhere for future investment banking services.

3. **Positive reports attract new clients**—Firms must compete with one another for investment banking business. Favorable analyst coverage of a company may induce that company to hire the firm to underwrite a securities offering. A company might be unlikely to hire an underwriter to sell its stock if the firm's analyst has a negative view of the stock.

- **Brokerage Commissions**—Brokerage firms usually don't charge for their research reports. But a positive-sounding analyst report can help firms make money indirectly by generating more purchases and sales of covered securities—which, in turn, result in additional brokerage commissions.
- **Analyst Compensation**—Brokerage firms' compensation arrangements can put pressure on analysts to issue positive research reports and recommendations. For example, some firms link compensation and bonuses—directly or indirectly—to the number of investment banking deals the analyst lands or to the profitability of the firm's investment banking division.
- **Ownership Interests in the Company**—An analyst, other employees, and the firm itself may own significant positions in the companies an analyst covers. Analysts may also participate in employee stock-purchase pools that invest in companies they cover. And in a growing trend called "venture investing," an analyst's firm or colleagues may acquire a stake in a start-up by obtaining discounted, pre-IPO shares. These practices allow an analyst, the firm he or she works for, or both to profit, directly or indirectly, from owning securities in companies the analyst covers.

Disclosure and Recent Rule Changes

The rules of the NYSE and FINRA require analysts in some circumstances to disclose certain conflicts of interest when recommending the purchase or sale of a specific security. On May 10, 2002, the SEC approved proposed changes to these rules, strengthening the disclosures that analysts and firms must make. The NYSE and FINRA decided upon an implementation schedule of between 60 and 180 calendar days for the new rules in order to provide reasonable time periods for firms to develop and implement policies, procedures and systems to comply with the new requirements. These rules implement key structural reforms aimed at increasing analysts' independence and further managing conflicts of interest. They also require increased disclosure of conflicts in research reports and public appearances. Key provisions of the rules include the following:

- **No Promises of Favorable Research** — NYSE and FINRA rules now prohibit analysts from offering a favorable research rating or specific price target to induce investment banking business from companies. The rule changes also impose "quiet periods" that bar a firm that is acting as manager or co-manager of a securities offering from issuing a report on a company within 40 days after an initial public offering or within 10 days after a secondary offering for an inactively traded company.

> **Significance of the Change**: Promising research coverage to a company will not be as attractive if the research may not be issued within the initial days following the offering.

- **Limitations on Relationships and Communications** — The rule changes prohibit research analysts from being supervised by the investment banking department. In addition, investment banking personnel are prohibited from discussing research reports with analysts prior to distribution, unless staff from the firm's legal/compliance department monitor those communications. Analysts are also prohibited from sharing draft research reports with the target companies, other than to check facts after approval from the firm's legal/compliance department.

> **Significance of the Change**: These provisions help protect research analysts from influences that could impair their objectivity and independence.

- **Analyst Compensation** — The rule changes bar securities firms from tying an analyst's compensation to specific investment banking transactions. Furthermore, if an analyst's compensation is based on the firm's general investment banking revenues, that fact must be disclosed in the firm's research reports.

> **Significance of the Change**: Prohibiting compensation from specific investment banking transactions significantly curtails a potentially major influence on research analysts' objectivity.

- **Firm Compensation** — The rule changes require a securities firm to disclose in a research report if it managed or co-managed a public offering of equity securities for the company or if it received any compensation for investment banking services from the company in the past 12 months. A firm also must disclose if it expects to receive or intends to seek compensation for investment banking services from the company during the next 3 months.

> **Significance of the Change**: Requiring securities firms to disclose compensation from investment banking clients can alert investors to potential biases in their recommendations.

- **Restrictions on Personal Trading by Analysts** — The rule changes bar analysts and members of their households from investing in a company's securities prior to its initial public offering if the company is in the business sector that the analyst covers. In addition, the rule changes require "blackout periods" that prohibit analysts from trading securities of the companies they follow for 30 days before and 5 days after they issue a research report about the company, and also prohibits analysts from trading against their most recent recommendations—subject to exceptions for unanticipated significant changes in the personal financial circumstances of the beneficial owner of a research analyst account.

> **Significance of the Change**: Prohibiting analysts from trading around the time they issue research reports should reduce conflicts arising from personal financial interests.

- **Disclosures of Financial Interests in Covered Companies** — The rule changes require analysts to disclose if they own shares of recommended companies. Firms are also required to disclose if they own 1% or more of a company's equity securities as of the previous month end.

> **Significance of the Change**: Requiring analysts and securities firms to disclose financial interests can alert investors to potential biases in their recommendations.

- **Disclosures in Research Reports Regarding the Firm's Ratings** — The rule changes require firms to clearly explain in research reports the meaning of all ratings terms they use, and this terminology must be consistent with its plain meaning. Additionally, firms must provide the percentage of all the ratings that they have assigned to buy / hold / sell categories and the percentage of investment banking clients in each category. Firms are also required to provide a graph or chart that plots the historical price movements of the security and indicates those points at which the firm initiated and changed ratings and price targets for the company.

> **Significance of the Change**: These disclosures will assist investors in deciding what value to place on a securities firm's ratings and provide them with better information to assess its research.

- **Disclosures During Public Appearances by Analysts** — The rule changes require disclosures from analysts during public appearances, such as television or radio interviews. Guest analysts will have disclose if they or their firm have a position in the stock; if the company is an investment banking client of the firm; if the analyst or a member of the analyst's household is an officer, director or advisory board member of the recommended issuer; and other material conflicts.

Significance of the Change: This disclosure will inform investors who learn of analyst opinions and ratings through the media — rather than in written research reports — of analyst and firm conflicts.

What Conflicts May Mean to You

The fact that an analyst—or the analyst's firm—may have a conflict of interest does not mean that his or her recommendation is flawed or unwise. But it's a fact you should know and consider in assessing whether the recommendation is wise *for you*.

It's up to you to educate yourself to make sure that any investments you choose match your goals and tolerance for risk. Remember that analysts generally do not function as your financial adviser when they make recommendations—they're not providing individually tailored investment advice, and they're not taking your personal circumstances into consideration.

Uncovering Conflicts

In addition to paying close attention to the disclosures that firms and analysts make, here are some steps you can take to assess whether and to what extent analyst conflicts may exist:

Identify the Underwriter

Before you buy, confirm whether the analyst's firm underwrote a recommended company's stock by looking at the prospectus, which is part of the registration statement for the offering. Note that firms are required to disclose in research reports whether they managed or co-managed a public offering. You'll find a list of the lead or managing underwriters on the front cover of both the preliminary and final copies of the prospectus. By convention, the name of the lead underwriter—the firm that stands to make the most money on the deal—will appear first, and any co-managers will generally be listed second in alphabetical order. Other firms participating in the deal will be listed only in the "Underwriting" or "Plan of Distribution" sections of the final supplement to the prospectus. You can search for registration statements using the SEC's EDGAR database at www.sec.gov/edgar.shtml. The final supplement to the prospectus will appear in EDGAR as a "424" filing.

Research Ownership Interests

A company's registration statement and its annual report on Form 10-K will tell you who the beneficial owners of more than five percent of a class of equity securities are. Research reports on a company must disclose whether the securities firm issuing the report (or any of its affiliates) beneficially owns one percent or more of any class of common equity securities of the subject company. The issuer's registration statement will also tell you about private sales of the company's securities during the past three years. In addition to the disclosure requirements in the new rules, you may be able to ascertain ownership by checking the following SEC forms:

- **Schedules 13D and 13G**—Any person who acquires a beneficial ownership of more than five percent must file a Schedule 13D. Schedule 13G is a much abbreviated version of Schedule 13D that is only available for use by a limited category of "persons," such as banks, broker-dealers, or insurance companies.

- **Forms 3, 4, and 5**—Officers, directors, and beneficial owners of more than 10 percent must report their holdings—and any changes in their holdings—to the SEC on Forms 3, 4, and 5.

- **Form 144**—If an analyst or a firm holds "restricted" securities from the company—meaning those acquired in an unregistered, private sale from the issuer or its affiliates—then investors can find out whether the analyst or the firm recently sold the stock by researching their Form 144 filings.

As of November 4, 2002, all statements of beneficial ownership on Schedules 13D and 13G (including those relating to the securities of foreign private issuers) must be submitted electronically using the SEC's EDGAR system. If you can't find a form on EDGAR, please refer to information on "How to Request Public Documents" at http://www.sec.gov/answers/publicdocs.htm. Or check the "Quotes" section of the Nasdaq Stock Market's website at http://quotes.nasdaq.com/

Unlock the Mystery of "Lock-ups"

If the analyst's firm acquired ownership interests through venture investing, the shares generally will be subject to a "lock-up" agreement during and after the issuer's initial public offering. Lock-up agreements prohibit company insiders—including employees, their friends and family, and venture capitalists—from selling their shares for a set period of time without the underwriter's permission. While the underwriter can choose to end a lock-up period early—whether because of market conditions, the performance of the offering, or other factors—lock-ups generally last for 180 days after the offering's registration statement becomes effective.

After the lock-up period ends, the firm may be able to sell the stock. If you're considering investing in a company that has recently conducted an initial public offering, you'll want to check whether a lock-up agreement is in effect and when it expires or if the underwriter waived any lock-up restrictions. This is important information because a company's stock price may be affected by the prospect of lock-up shares being sold into the market when the lock-up ends. It is also a data point you can consider when assessing research reports issued just before a lock-up period expires—which are sometimes known as "booster shot" reports.

To find out whether a company has a lock-up agreement, check the "Underwriting" or "Plan of Distribution" sections of the prospectus. That's where companies must disclose that information. You can contact the company's shareholder relations department to ask for its prospectus, or use the SEC's EDGAR database if the company has filed its prospectus electronically. If you can't find a form on EDGAR, please refer to information on "How to Request Public Documents" at http://www.sec.gov/answers/publicdocs.htm. There are also commercial websites you can use for free that track when companies' lock-up agreements expire. The SEC does not endorse these websites and makes no representation about any of the information or services contained on these websites.

How You Can Protect Yourself

We advise all investors to do their homework before investing. If you purchase a security solely because an analyst said the company was one of his or her "top picks," you may be doing yourself a disservice. Especially if the company is one you've never heard of, take time to investigate:

- When assessing a firm's research report of a company, be sure to read all of the disclosures about the firm and analysts' conflicts of interest and the types of research recommendations that the firm has made.

- Research the company's financial reports using the SEC's EDGAR database at http://www.sec.gov/edgar.shtml, or call the company for copies. If you can't analyze them on your own, ask a trusted professional for help.

- Find out if a lock-up period is about to expire or whether the underwriter waived it. While that may not necessarily affect your decision to buy, it may put an analyst recommendation in perspective.

- Confirm whether the analyst's firm underwrote one of the company's recent stock offerings—especially its IPO.

- Learn as much as you can about the company by reading independent news reports, commercial databases, and reference books. Your local library may have these and other resources.

- Talk to your broker or financial adviser and ask questions about the company and its prospects. But bear in mind that if your broker's firm issued a positive report on a company, your broker will be hard-pressed to contradict it. Be sure to ask your broker whether a particular investment is suitable for you in light of your financial circumstances.

Above all, always remember that even the soundest recommendation from the most trust-worthy analyst may not be a good choice for you. That's one reason we caution investors never to rely solely on an analyst's recommendation when buying or selling a stock. Before you act, ask yourself whether the decision fits with your goals, your time horizon, and your tolerance for risk. Know what you're buying—or selling—and why.

http://www.sec.gov/investor/pubs/analysts.htm

HOW TO INVEST IN COMMON STOCKS

A Guide to Using

THE VALUE LINE INVESTMENT SURVEY

GLOSSARY

Aaa Corporate Bond Rate—the average yield on corporate bonds rated Aaa by Moody's Investors Service. Bonds that are rated Aaa are judged to be of the best quality.

Accrual Accounting—a method of matching income and expenses in the period they are actually applicable, regardless of the date of collection or payment.

Adjustable-Rate Mortgage Loans (ARMs) (Bank and Thrift Industries)—mortgage loans on which the interest rate charged by the lender is adjusted in accordance with a stipulated, publicly available cost-of-funds index, such as the yield on one-year Treasury bills. (*See **Fixed-Rate Mortgage Loans.***)

After market—the market for replacement parts and accessories for a product or group of products. The Auto Parts (Replacement) Industry participates in the automotive after market.

After-Tax Corporate Profits—*see **Corporate Profits.***

AFUDC—*see **Allowance for Funds Used During Construction.***

Allowance for Funds Used During Construction (Electric Utility Industries)—a non cash credit to income consisting of equity and debt components. This non cash income results from construction work in progress and is expected to be converted into cash income at a future date.

American Depository Receipts (ADRs)—since most other nations do not allow stock certificates to leave the country, a foreign company will arrange for a trustee (typically a large bank) to issue ADRs (sometimes called American Depositary Shares, or ADSs) representing the actual, or underlying, shares. Each ADR is equivalent to a specified number of shares (the ratio is shown in a footnote on the Value Line page).

American Stock Exchange Composite—a market-capitalization weighted index of the prices of the stocks traded on the American Stock Exchange.

Annual Change D-J Industrials (Investment Companies)—the annual change from year end to year end in the Dow Jones Industrial Average, expressed as a percentage.

Annual Change in Net Asset Value (Investment Companies)—the change in percentage terms of the net asset value per share at the end of any given year from what it was at the end of the preceding year, adjusted for any capital gains distributions made during the year.

Annual Rates of Change (Per Share)—compounded annual rates of change of per-share sales, cash flow, earnings, dividends, and book value (or other industry-specific per-share figures) over the past ten years and five years and estimated over the coming three to five years. All forecasted rates of change are computed from the average figure for the past three-year period to an average for a future three-year period. If data for a three-year base period are not available, a two- or one-year base may be used.

Annual Total Return—the capital gain or loss plus the sum of dividend disbursements expected over the next three to five years, all divided by the recent price and expressed as an average annual rate.

Arbitrage—the simultaneous purchase of an asset in one market and sale of the same asset, or assets equivalent to the asset purchased, in another market. Often referred to as "classical arbitrage," this type of transaction should result in a risk-free profit. Risk Arbitrage refers to transactions in stocks involved in takeover activity.

Arbitrageur—a person or organization that engages in arbitrage activity.

Arithmetic Average—a simple mean. Items to be averaged are added and their sum is divided by the number of items. The result is an arithmetic, or simple, average (or mean).

ARM—*see **Adjustable-Rate Mortgage Loans.***

AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-15

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at page 25, lines 3-4, that only arithmetic mean return rates are appropriate for cost of capital purposes. Please indicate if Ms. Ahern is aware of any analysts' forecasts of EPS that do not use arithmetic mean returns but rather use geometric mean returns and identify such forecasts.

Response: Ms. Ahern's comments that arithmetic mean return rates are appropriate for cost of capital purposes are in the context of evaluating a long-term series of randomly generated returns and equity risk premiums which vary from year to year. As she states on page 25, lines7-18 of her Rebuttal Testimony:

> Because the arithmetic mean captures the prospect for variance in returns and equity risk premiums, it provides the valuable insight needed by investors in estimating *risk* in the future when making a current investment. Absent such valuable insight into the potential variance of returns, investors cannot meaningfully evaluate prospective risk. The geometric mean of ex-post equity risk premiums provides no insight into the potential variance of future returns because the geometric mean relates the change over many periods to a <u>constant</u> rate of change, rather than the year-to-year fluctuations, or variance, *critical to risk analysis* and therefore has little or no value to investors seeking to measure risk.

Ms. Ahern is aware that security analysts' five-year growth rate forecasts in earnings per share (EPS) are generally compound growth rates, which are assumed to be constant in each of the next five years, but which in reality are expected to vary from year to year. Moreover, these growth forecasts are meant to be used to project accounting cash flows and not market returns.

AQUARION WATER COMPANY OF NEW HAMPSHIRE
DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-2

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at page 2, lines 17-20, regarding the purpose of Ms. Ahern's testimony. Please indicate if Ms. Ahern is offering testimony as to the cost of common equity, cost of debt, capital structure, and total cost of capital for Aquarion Water Company of New Hampshire.

Response: As Ms. Ahern's testimony states, based on her review of Mr. Parcell's analysis and the corrections that should be made to that analysis, she would recommend the Commission find that the cost of equity for the Company is in the range of 10.95%-11.63%, with a mid-point of 11.29%. Based on Ms. Ahern's analysis, she concluded that the cost of equity proposed by the Company is conservative. She is not offering testimony specifically as to the cost debt, capital structure, or total cost of capital for the Company.

AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-5

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at pages 3-14 regarding the business risk of water utilities and Aquarion of New Hampshire. Please indicate if Ms. Ahern has performed any analyses of the level of Aquarion of New Hampshire's business risk at the current time relative to the level of business risks at the time of the Company's last rate proceeding. If the answer is yes, please indicate where in Ms. Ahern's testimony such analyses are contained.

Response: Ms. Ahern has not performed any analyses of the level of Aquarion Water Company of New Hampshire's business risk at the current time relative to the level of business risks at the time of the Company's last rate proceeding because, as noted on lines 7-8 on page 17 of her Rebuttal Testimony, both the cost of capital and ratemaking are prospective in nature. In addition, Mr. Parcell agrees that the cost of capital is prospective with his comments on page 5, lines 30-31 of his Direct Testimony, where he states that "the cost of capital is an opportunity cost and is prospective-looking."

AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-17

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at pages 41-42, concerning the financial risk of Aquarion Water Co. of New Hampshire. Please indicate if Ms. Ahern has compared the financial risk that the Company currently faces relative to the financial risk at the time of the Company's last rate proceeding.

Response: Please see Ms. Ahern's response to Request No. Hampton 4-5.

COMPARISON OF RISK INDICATORS FOR WATER PROXY GROUP IN 2009 AND 2013

Company	Value Line Safety		Value Line Beta		Value Line Financial Strength		Standard & Poor's Stock Ranking	
	2009	2013	2009	2013	2009	2013	2009	2013
American States Water Company	3	2	0.95	0.70	B++	A	B+	A-
American Water Works Company		3		0.65				
Aqua America Inc.	3	2	0.90	0.60	B+	B++	A	A-
Artesian Resources Corp.		2		0.55		B+		A-
California Water Service, Inc.	2	3	1.05	0.65	B++	B+	B+	A-
Middlesex Water	2	2	0.80	0.70	B+	B+	B+	A-
SJW Corporation	3	3	1.05	0.85	B+	B+	A-	B+
York Water Co.	2	2	0.65	0.65	B++	B++	B+	A-
Average -- All Companies	2.5	2.375	0.90	0.67	B+/B++	B+/B++	B+/A-	A-
Average -- excl Am Water Works and Artesian Resources.	2.5	2.33	0.90	0.69	B+/B++	B+/B++	B+/A-	A-

Sources: Value Line Investment Survey and Standard & Poor's Stock Guide, 2009 and 2013.

AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-20

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at page 48, where the size of Aquarion Water Co. of New Hampshire is compared to the water proxy group. Please indicate if the companies contained in the water proxy group also have multiple utility subsidiaries that are smaller than the proxy companies (on a consolidated basis).

Response: Yes, some of the companies in Mr. Parcell's Value Line water proxy group have multiple utility subsidiaries that, by definition, are individually smaller than the proxy companies themselves as financial statements those proxy companies which are holding companies are based upon a consolidation of the results and financial positions of the utility subsidiaries. Moreover, it is necessary to compare the size of Aquarion Water Company of New Hampshire to the companies in the water proxy group, because it is the market data of those companies upon which Mr. Parcell relied in determining his recommended common equity cost rate and that market data reflect investors' perception of the investment risk of those proxy companies, including risk due to size. Since the average water proxy group company is significantly larger than Aquarion Water Company of New Hampshire as discussed on page 47, line 33 through page 50, line 21, an upward adjustment to Mr. Parcell's recommended common equity cost rate is necessary in order for his recommendation to reflect the additional risk of Aquarion Water Company of New Hampshire due to its smaller relative size, because as discussed on page 44, line 25 through page 26, line 13, all else equal, relative size is a risk factor which must be taken into account in determining an appropriate common equity cost rate.

AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-3

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at page 2, line 24, regarding the requested capital structure of the Company. Please identify all information provided to Ms. Ahern by the Company that relates to the capital structure of Aquarion Water Co. of New Hampshire and/or its affiliate companies, and provide this same information to the Town of Hampton.

Response: Ms. Ahern was provided and reviewed Aquarion Water Co. of New Hampshire's filing in this proceeding relative to capital structure and the Company's 2011 Annual Report to the New Hampshire Public Utilities Commission.

AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests – Set 4

Data Request Received: March 15, 2013
Request No. Hampton 4-7

Date of Response: March 27, 2013
Witness: P. Ahern

REQUEST: In reference to Ahern Rebuttal Testimony at page 11, lines 18-22, regarding the portion of debt in the capital structure of water utilities. Please indicate Ms. Ahern's understanding of the trends in capital structure ratios of Aquarion Water Co. of New Hampshire. Please also indicate Ms. Ahern's understanding of the equity infusions into the Company by affiliated companies over the past 10 years.

Response: Ms. Ahern's understanding of the trends in capital structure ratios of Aquarion Water Co. of New Hampshire is limited to the data presented on Schedule No. 4C of the Company's filing which shows a gradual decline in common equity ratio from 43.57% percent in 2006 to 38.38% in 2009, rising only slightly to 41.26% in 2011 and on a pro forma basis. It is Ms. Ahern's understanding that during the past 10 years there have been no equity infusions into the Company by affiliated companies.

Moreover, both the historical trends in capital structure over the past 10 years and possible equity infusions into the Company are irrelevant to this proceeding as the cost of capital and ratemaking are prospective as noted on lines 7-8 on page 17 of her Rebuttal Testimony. In addition, as stated in response to Request of Hampton 4-5, Mr. Parcell agrees that the cost of capital is prospective with his comments on page 5, lines 30-31 of his Direct Testimony, where he states that "the cost of capital is an opportunity cost and is prospective-looking." In addition, as stated on page 46, lines 5-7 of Ms. Ahern's Rebuttal Testimony, "it is the use of funds invested and not the source of those funds which gives rise to the risk of any investment. Financial literature in support of this concept can be found on page 46, line 17 through page 47, line 32. Hence, historical capital structure trends as well as possible equity infusions, i.e., source of some of the invested funds, are irrelevant to the cost of capital.

AQUARION WATER COMPANY OF NEW HAMPSHIRE

DW 12-085

Aquarion Water Company's Responses to Hampton Data Requests—Set 4

Data Request Received: March 15, 2013
Request No.: Hampton 4-22

Date of Response: March 27, 2013
Witness: T. Dixon

REQUEST: Please indicate by amount, issuer and year the annual infusions of common equity into Aquarion Water Co. of New Hampshire by its direct and indirect parent companies for the period 2000 to the present.

RESPONSE: Aquarion only purchased the New Hampshire entity in 2002. Since that time there have been no equity infusions. Equity balances have changed through the impact of net income and dividends.