

NASUCA

2014 Mid-Year Conference

“The “Earnings Gap” and Other Measures of Profitability and Shareholder Value”

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WATER UTILITIES HAVE NOT EARNED THEIR AUTHORIZED RETURNS ON EQUITY

Water utilities often claim that they have not earned their authorized ROEs.

NARUC Resolution (July 24, 2013) – “NARUC recommends that economic regulators carefully consider and implement ***appropriate ratemaking measures*** as needed so that water and wastewater utilities have a ***reasonable opportunity to earn their authorized returns*** within their jurisdictions.”

Responses:

What has been the trend in authorized ROEs for water companies in recent years?

How do water ROEs compare to other utilities?

Individual company authorized ROEs have been on decline since 2009 – Table 1.

Composite authorized ROEs for water utility holding companies have also declined – Table 2.

At the composite holding company level, water utilities have generally achieved their authorized ROEs – Table 3

Impact of double leverage;

Impact of management fees and other service company activities; and,

Impact of non-regulated operations.

How do water authorized ROEs compare to electric and natural gas utilities – Table 4

Responses:

What has been the trend in authorized ROEs for water companies in recent years?

How do water ROEs compare to other utilities?

Individual company authorized ROEs have been on decline since 2009 –
Table 1

Average Authorized Returns on Equity For Water Utilities (Cases Decided in 2009-2012)	
2009	10.36%
2010	10.29%
2011	9.95%
2012	9.79%

TABLE 1
AUTHORIZED RETURNS ON EQUITY FOR WATER UTILITIES
IN CASES DECIDED IN 2009

CLIENT	COMMISSION	DOCKET NO.	DATE OF ORDER	ROE AUTHORIZED	
Spring Creek Utilities, Inc.	Nevada	08-06036	01/15/09	11.93%	
Spring Creek Utilities, Inc.	Nevada	08-06036	01/15/09	11.93%	
Louisiana Water Service, Inc.	Louisiana	U-30553	01/21/09	11.60%	
United Water Toms River, Inc.	New Jersey	R-WR-08030139	01/28/09	10.00%	
United Water New Jersey, Inc.	New Jersey	WR-08090710	04/03/09	10.30%	
United Water West Milford	New Jersey	WR08100928	04/27/09	8.32%	
United Water Arlington Hills	New Jersey	WR08100929	04/27/09	8.32%	
NRG Energy Center Harrisburg	New Jersey	WR-08080550	05/21/09	10.30%	
The Columbia Water Co.	PA	R-2006-2045157	06/10/09	10.50%	
Aopena Power Co.	Michigan	U-15250	06/12/09	11.00%	
Tidewater Utilities, Inc.	Delaware	09-29	09/07/09	10.00%	
Tidewater Utilities, Inc.	Delaware	09-29	09/07/09	10.00%	
Artesian Water Co.	Delaware	08-96	09/22/09	10.00%	
Artesian Water Co.	Delaware	08-96	09/22/09	10.00%	
Iowa-American Water Co.	Iowa	RPU-2009-0004	10/08/09	10.50%	
Alpena Power Co.	Michigan	U-15935	10/13/09	10.80%	
Water Service Corp. of KY	Kentucky	2008-00563	11/09/09	10.60%	
Average for 2009					10.36%

TABLE 1 (CONT.)
AUTHORIZED RETURNS ON EQUITY FOR WATER UTILITIES
IN CASES DECIDED IN 2010

CLIENT	COMMISSION	DOCKET NO.	DATE OF ORDER	ROE AUTHORIZED	
Illinois American Water Co.	Illinois	09-0319	04/13/10	10.38%	
Illinois American Water Co.	Illinois	09-0319	04/13/10	10.38%	
Illinois American Water Co.	Illinois	09-0319	04/13/10	10.38%	
United Utility Co., Inc.	S. Carolina	2009-479-W/S	05/17/10	10.00%	
Connecticut Water Co.	Connecticut	09-12-11	07/14/10	9.75%	
Utilities inc. of Central NV	Nevada	09-12017	07/16/10	11.50%	
Utilities inc. of Central NV	Nevada	09-12017	07/16/10	11.50%	
United Water New York, Inc.	New York	09-W-0731	07/20/10	10.20%	
United Water New York, Inc.	New York	09-W-0731	07/20/10	10.20%	
Tega Cay Water Services, Inc.	S. Carolina	2009-473-WS	08/16/10	9.57%	
Aquarion Water Co.	Connecticut	10-02-13	09/08/10	9.995%	
Massanutten Public Ser.Corp	Virginia	PUE-2009-00041	10/18/10	10.40%	
San Jose Water Co.	California	U-168-W	10/28/10	10.20%	
San Jose Water Co.	California	U-160-W	10/28/10	10.20%	
United Water Westchester, Inc.	New York	09-W-0828	12/19/10	10.00%	
United Water Westchester, Inc.	New York	09-W-0828	12/19/10	10.00%	
Average for 2010					10.29%

TABLE 1 (CONT.)
AUTHORIZED RETURNS ON EQUITY FOR WATER UTILITIES
IN CASES DECIDED IN 2011

CLIENT	COMMISSION	DOCKET NO.	DATE OF ORDER	ROE AUTHORIZED	
United Water New Rochelle, Inc.	New York	09-W-0824	01/21/11	10.00%	
United Water New Rochelle, Inc.	New York	09-W-0824	01/21/11	10.00%	
Carolina Water Service of NC	N. Carolina	W-354, SUB 324	02/11/11	10.20%	
Carolina Water Service of NC	N. Carolina	W-354, SUB 327	02/11/11	10.20%	
Utility Center, Inc.	Indiana	43874	04/13/11	9.60%	
United Water Connecticut	Connecticut	10-09-08	04/27/11	9.10%	
United Water Great Gorge, Inc.	New Jersey	WR10100785	06/01/11	10.30%	
Aqua North Carolina, Inc.	N. Carolina	W-218, SUB 319	09/13/11	10.20%	
Aqua North Carolina, Inc.	N. Carolina	W-218, SUB 319	09/13/11	10.20%	
United Water Delaware, Inc.	Delaware	10-421	09/20/11	10.00%	
United Water PA, Inc.	PA	R-20011-2232985	10/05/11	10.00%	
The Atlantic City Sew. Co.	New Jersey	WR11040247	10/13/11	10.30%	
Carolina Water Service, Inc.	S. Carolina	2011-47-WS	10/24/11	9.40%	
Carolina Water Service, Inc.	S. Carolina	2011-47-WS	10/24/11	9.40%	
San Jose Water Co.	California	11-05-002	10/31/11	9.99%	
San Jose Water Co.	California	11-05-002	10/31/11	9.99%	
United Water New Jersey, Inc.	New Jersey	WR11070428	12/02/11	10.30%	
Average for 2011					9.95%

TABLE 1 (CONT.)
AUTHORIZED RETURNS ON EQUITY FOR WATER UTILITIES
IN CASES DECIDED IN 2012

CLIENT	COMMISSION	DOCKET NO.	DATE OF ORDER	ROE AUTHORIZED	
Artesian Water Co.	Delaware	11.207	01/01/12	10.00%	
United Water Rhode Island, Inc.	Rhode Island	4255	01/12/12	9.85%	
United Water Rhode Island, Inc.	Rhode Island	4255	01/12/12	9.85%	
Iowa American Water Co.	Iowa	RPU-2011-0001	02/23/12	10.30%	
Iowa American Water Co.	Iowa	RPU-2011-0001	02/23/12	10.30%	
Long Island American Water Co.	New York	11-W-0200	03/20/12	9.65%	
Long Island American Water Co.	New York	11-W-0082	03/20/12	9.65%	
United Water Owego-Nichols	New York	11-W-0082	03/21/12	9.60%	
United Water Owego-Nichols	New York	11-W-0082	03/21/12	9.60%	
Aqua New Jersey, Inc.	New Jersey	WR11120859	04/11/12	10.15%	
Tidewater Utilities, Inc.	Delaware	11-397	06/19/12	9.75%	
Middlesex Water Co.	New Jersey	WR 12010027 / PUC 1653-2012	07/18/12	10.15%	
Illinois American Water Co.	Illinois	11-0767	09/19/12	9.34%	
Illinois American Water Co.	Illinois	11-0767	09/19/12	9.34%	
Illinois American Water Co.	Illinois	11-0767	09/19/12	9.34%	
Average for 2012					9.79%

Composite authorized ROEs for water utility holding companies have also declined – Table 2

TABLE 2
AUTHORIZED RETURNS ON EQUITY AND MARKET-TO-BOOK RATIOS
REGULATED UTILITY GROUPS

Water Utilities			Electric Utilities		
Year	Authorized Return on Equity	Market-To-Book Ratio	Year	Authorized Return on Equity	Market-To-Book Ratio
2009	10.06%	174%	2009	10.59%	135%
2010	10.02%	187%	2010	10.72%	136%
2011	9.98%	182%	2011	10.66%	143%
2012	9.98%	204%	2012	10.53%	159%
2013	9.97%	206%	2013	10.45%	161%

Gas-Electric Utilities			Natural Gas Utilities		
Year	Authorized Return on Equity	Market-To-Book Ratio	Year	Authorized Return on Equity	Market-To-Book Ratio
2009	10.61%	136%	2009	10.62%	181%
2010	10.58%	143%	2010	10.64%	214%
2011	10.51%	150%	2011	10.60%	256%
2012	10.41%	164%	2012	10.60%	210%
2013	10.33%	198%	2013	10.56%	215%

Source: AUS Utility Reports, various years.

At the composite holding company level, water utilities have generally achieved their authorized ROEs – Table 3

Impact of double leverage; Impact of management fees and other service company activities; and, Impact of non-regulated operations

TABLE 3
AUTHORIZED RETURNS ON EQUITY AND EARNED RETURNS ON EQUITY
REGULATED UTILITY GROUPS

Water Utilities		
Year	Authorized Return on Equity	Earned Return on Equity
2009	10.06%	8.3%
2010	10.02%	9.1%
2011	9.98%	9.9%
2012	9.98%	10.2%
2013	9.97%	9.9%

Electric Utilities		
Year	Authorized Return on Equity	Earned Return on Equity
2009	10.59%	9.5%
2010	10.72%	11.2%
2011	10.66%	9.7%
2012	10.53%	9.3%
2013	10.45%	9.0%

Gas-Electric Utilities		
Year	Authorized Return on Equity	Earned Return on Equity
2009	10.61%	10.0%
2010	10.58%	11.2%
2011	10.51%	10.5%
2012	10.41%	9.3%
2013	10.33%	9.3%

Natural Gas Utilities		
Year	Authorized Return on Equity	Earned Return on Equity
2009	10.62%	11.2%
2010	10.64%	12.2%
2011	10.60%	11.1%
2012	10.60%	9.9%
2013	10.56%	9.6%

Source: AUS Utility Reports, various years.

How do water authorized ROEs compare to electric and natural gas utilities – Table 4

TABLE 4
SUMMARY OF MAJOR RATE CASE DECISIONS IN UNITED STATES

Year	Electric Utilities		Gas Utilities	
	ROE %	# Cases	ROE %	# Cases
1981	15.22%	123	15.11%	60
1982	15.78%	125	15.62%	83
1983	15.36%	95	15.25%	65
1984	15.32%	75	15.31%	39
1985	15.20%	58	14.75%	34
1986	13.93%	49	13.46%	25
1987	12.99%	57	12.74%	29
1988	12.79%	33	12.85%	31
1989	12.97%	27	12.88%	31
1990	12.70%	44	12.67%	31
1991	12.55%	45	12.46%	35
1992	12.09%	48	12.01%	29
1993	11.41%	32	11.35%	45
1994	11.34%	31	11.35%	28
1995	11.55%	33	11.43%	16
1996	11.39%	22	11.19%	20
1997	11.40%	11	11.29%	13
1998	11.66%	10	11.51%	10
1999	10.77%	20	10.66%	9
2000	11.43%	12	11.39%	12
2001	11.09%	18	10.95%	7
2002	11.16%	22	11.03%	21
2003	10.97%	22	10.99%	25
2004	10.75%	19	10.59%	20
2005	10.54%	29	10.46%	26
2006	10.36%	26	10.43%	16
2007	10.36%	39	10.24%	37
2008	10.46%	37	10.37%	30
2009	10.48%	39	10.19%	29
2010	10.34%	59	10.08%	37
2011	10.29%	42	9.92%	16
2012	10.17%	58	9.94%	35
2013	10.02%	48	9.68%	21

Source: Regulatory Research Associates, Regulatory Focus

HAVE THESE AUTHORIZED ROEs BEEN ADEQUATE TO MAINTAIN FINANCIAL INTEGRITY OF WATER UTILITIES?

The NARUC Resolution cited a need to “assure confidence in the financial soundness of the utility.”

Responses:

The market-to-book ratios of water utilities have substantially exceeded those of electric and combination gas-electric utilities – Table 2

This is indication that the stock market favorably accepts both the level of authorized ROEs and the achieved level of ROEs

Why are market-to-book ratios meaningful?

Composite authorized ROEs for water utility holding companies have also declined – Table 2

TABLE 2
AUTHORIZED RETURNS ON EQUITY AND MARKET-TO-BOOK RATIOS
REGULATED UTILITY GROUPS

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Year	Authorized Return on Equity	Market-To-Book Ratio	Year	Authorized Return on Equity	Market-To-Book Ratio
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Source: AUS Utility Reports, various years.

INDIVIDUAL WATER UTILITIES ARE SMALLER IN SIZE THAN THE PROXY HOLDING COMPANIES

Utility cost of capital witnesses often claim that water utilities are smaller than the water holding companies making up the proxy groups used to develop the cost of equity

Responses:

Of course the size of the individual water utilities are smaller than the size of the holding companies of which they are a part.

Equity is not raised at the individual water utility level, but rather at the publicly-traded holding company level.

The relevant entity is the one that investors can purchase shares in. This is the holding company level.

In many cases, even debt is raised at a level above that of the individual water utilities.

If “size matters” suggest that the holding companies merge all of their individual water utilities into one large utility and therefore reduce their risk.

WATER UTILITIES ARE MORE CAPITAL INTENSIVE THAN OTHER TYPES OF UTILITIES

Responses:

Any meaningful impact of capital programs is reflected in the security ratings and risk measures of water utilities.

Water utilities have superior risk measures in comparison to electric utilities – Table 5

TABLE 5**COMPARISON OF RISK INDICATORS
WATER UTILITIES AND ELECTRIC UTILITIES**

Risk Indicator	Water Utilities	Electric Utilities	S&P 500
Value Line Safety	2.5	2.2	2.7
Value Line Beta	0.67	0.76	1.05
Value Line Financial Strength	A	B++	B++
S&P Stock Ranking	A-	B+	
S&P Bond Rating	A+	A-/BBB+	

Sources: Value Line, AUS Utility Reports, Standard & Poor's Stock Guide.

WATER UTILITIES HAVE GREATER RISK TODAY THAN WAS THE CASE A FEW YEARS AGO

Water utility COC witnesses cite increasing risks of water utilities, compared to prior years.

Responses:

Risk is a relative term. The pertinent question is whether the relative risks of water utilities have changed over the past few years.

An assessment of relative risks can be performed by comparing the independent indicators of risks that are published by the rating agencies, Value Line and Standard & Poor's.

Over the past several years, the “risk measures” of publicly-traded water utilities and holding companies have declined – Table 6

TABLE 6

COMPARISON OF RISK INDICATORS FOR WATER PROXY GROUP IN 2009 AND 2014

Company	<u>Value Line Safety</u>		<u>Value Line Beta</u>		<u>Value Line Financial Strength</u>		<u>Standard & Poor's Stock Ranking</u>		<u>Moody's Bond Rating</u>		<u>Standard & Poor's Bond Rating</u>	
	2009	2014	2009	2014	2009	2014	2009	2014	2009	2014	2009	2014
American States Water Company	3	2	0.95	0.65	B++	A	B+	A-	A2	A2	A	A+
American Water Works Company		3		0.65		B+				A1	A+	A+
Aqua America Inc.	3	2	0.90	0.60	B+	B++	A	A			AA-	AA-
Artesian Resources Corp.		3		0.55		B						
California Water Service, Inc.	2	3	1.05	0.60	B++	B++	B+	A-			AA-	AA-
Middlesex Water	2	2	0.80	0.75	B+	B++	B+	A-			A	A
SJW Corporation	3	3	1.05	0.85	B+	B+	A-	B+				A
York Water Co.	2	2	0.65	0.70	B++	B+	B+	A				A-
Average -- All Companies	2.5	2.5	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, AUS Utility Reports, and Standard & Poor's Stock Guide, 2009 and 2014.

WATER UTILITIES SHOULD HAVE A HIGHER COST OF EQUITY THAN OTHER TYPES OF UTILITIES

Water utility COC witnesses often claim that water utilities should have a higher cost of equity than other utilities.

Response:

When we compare the authorized ROEs for water utilities, versus those of electric and LDC utilities, it is apparent that water utilities have traditionally had lower authorized ROEs – Table 2

Compare the authorized ROEs and M/Bs of water utilities versus other types of utilities – Table 2. Market has accepted these lower ROEs as being adequate.

Typical bond ratings of water utilities are single-A or double-A.

Most electric utilities are triple-B

Composite authorized ROEs for water utility holding companies have also declined – Table 2

TABLE 2
AUTHORIZED RETURNS ON EQUITY AND MARKET-TO-BOOK RATIOS
REGULATED UTILITY GROUPS

Water Utilities			Electric Utilities		
Year	Authorized Return on Equity	Market-To-Book Ratio	Year	Authorized Return on Equity	Market-To-Book Ratio
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Source: AUS Utility Reports, various years.

MOST WATER UTILITIES HAVE USE OF DSICs SO IF A PARTICULAR WATER UTILITY DOES NOT HAVE A DSIC IT IS MORE RISKY AND SHOULD HAVE A HIGHER RETURN ON EQUITY

Many water utilities have access to “Distribution System Improvement Charge”

Responses:

It is not accurate to cite the DSIC mechanisms of the water holding companies and imply that these are in effect for all subsidiaries and in all jurisdictions.

For those who do have DSICs, it is apparent that this is risk-reducing to utilities:

S&P April 19, 2011 RatingsDirect – “positive impact” of these mechanisms for water utilities.

Analogy of “decoupling” for electric and natural gas utilities.

wrong. As a result, we now project two additional scenarios, one upside and one downside. We set these scenarios approximately at one standard deviation from the base line (roughly the 20th and 80th percentiles of the distribution of possible outcomes). We use the downside case to estimate the credit impact of an economic outlook weaker than the expected case.

Industry Credit Outlook

In the gas sector, we had two ratings downgrades and no outlook changes during the first quarter. The rating trend, when considering outlooks and CreditWatch listings, is neutral: Of all the gas utilities we rate, 74% have a stable outlook, 13% have a positive or CreditWatch positive listing, while 13% have a negative or CreditWatch negative listing. In the water sector, we had no rating actions or outlook changes during the first quarter. With all the water utilities possessing stable outlooks, we expect the number of prospective rating changes to remain minimal in the near to intermediate term (one to two years).

Both gas and water utilities have relatively high ratings compared with the average for U.S. industrial companies ('B' category). This reflects the large percentage of gas utilities with excellent business risk profiles and to a much lesser extent strong business risk profiles. All water utilities have an excellent business risk profile. Generally offsetting the superior business risk profiles in both industries are the large number of aggressive financial risk profiles. About 49% of the gas industry carries an 'A' category corporate credit rating ('A+', 'A', and 'A-'), roughly 45% is in the 'BBB' category, about 4% is in the 'AA' category, and 2% are speculative grade ('BB+' and below). About 69% of the water utilities carry a 'A' category corporate credit rating, roughly 25% are in the 'BBB' rating category, and about 6% are in the 'AA' rating category. No water utilities are rated speculative grade.

Since 2011 began, Standard & Poor's lowered the corporate credit rating on one gas utility holding company and its operating subsidiary and has changed no water utility ratings. In March, we lowered the corporate credit rating on WGL Holdings Inc. (WGL) and Washington Gas Light Co. to 'A+' from 'AA-'. We lowered the ratings because WGL is increasing the size and consolidated cash flow percentage of its unregulated businesses. We believe these businesses are credit dilutive at WGL's high rating level because they are subject to more cash flow volatility and do not benefit from the regulated profile of the low-risk utility operations.

Solid industry fundamentals support the stable outlooks

Regulation smoothes cash flows and supports cost recovery. State regulation will continue to be an influential factor for gas and water utility credit ratings in 2011. Many recent regulatory developments have been positive for credit quality. While average returns on equity (ROE) have trended slightly downward, several jurisdictions have granted enhanced rate-making mechanisms that help ensure greater cash flow stability. Most important are rate "decoupling" and distribution system investment charge (DSIC) mechanisms. Rate decoupling protects a utility's financial performance when conservation leads to lower consumption as it essentially makes the utility whole by increasing customer charges to compensate for lower usage. The DSIC program, prevalent in the water sector, allows for rate increases for nonrevenue producing investments to replace aging infrastructure outside of general rate proceedings. We expect capital spending in the water sector to continue on an upward trend due to a generally aging infrastructure and stringent water treatment and quality standards. The DSIC program would be especially helpful in our optimistic case if capital spending increased notably to avoid cash flow "lags," meaning that any revenue increases associated with today's capital spending would not need to wait until the next rate case. Our pessimistic case, which includes economic contraction, higher unemployment rates, and dropping consumer sentiment, could threaten regulatory support from state commissions.

WATER UTILITIES ARE SMALLER THAN OTHER TYPES OF UTILITIES AND ARE THEREFORE MORE RISKY AND SHOULD HAVE A HIGHER COST OF EQUITY

Water utilities often claim that they are smaller than other types of utilities and thus require a higher ROE.

Responses:

The risks of water utilities, as measured by independent measures of risk, show that water utilities are less risky than electric utilities – Table 5

TABLE 5**COMPARISON OF RISK INDICATORS
WATER UTILITIES AND ELECTRIC UTILITIES**

Risk Indicator	Water Utilities	Electric Utilities	S&P 500
Value Line Safety	2.5	2.2	2.7
Value Line Beta	0.67	0.76	1.05
Value Line Financial Strength	A	B++	B++
S&P Stock Ranking	A-	B+	
S&P Bond Rating	A+	A-/BBB+	

Sources: Value Line, AUS Utility Reports, Standard & Poor's Stock Guide.

WATER UTILITY INDUSTRY HAS “UNIQUE” BUSINESS RISKS

EPA REQUIREMENTS

SWDA STANDARDS

CAPITAL INVESTMENT

LOWER DEPRECIATION RATES

SMALLER SIZE

Response:

All types of utilities have their “unique” types of risks

Coal generation costs

Transmission line expansion

Infrastructure improvement

Other utilities are much more impacted by certain factors, such as

Weather

Other impacts on consumption