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President of the Senate

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Speaker of the House of Representatives

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J.R. Kelly
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October 13, 2008

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COMMISSION CLERK

Ms. Ann Cole, Commission Clerk
Office of Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket No. 080121-WS

Dear Ms. Cole:

Enclosed for filing, on behalf of the Citizens of the State of Florida, are the original and 15 copies of the Direct Testimony of James A. Rothschild, Patricia W. Merchant, CPA, Earl Poucher, Andrew T. Woodcock, P.E., M.B.A. and Kimberly H. Dismukes (Public Version).

5+1 Please indicate the time and date of receipt on the enclosed duplicate of this letter and return it to our office.

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Sincerely,

Charlie Beck

Charlie Beck
Deputy Public Counsel

CJB:bsr

cc: all parties of record

DOCUMENT NO. DATE
09679-08 10/13/08
FPSC - COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

Application for increase in water and Wastewater rates in Alachua, Brevard, DeSoto, Highlands, Lake, Lee, Marion, Orange, Palm Beach, Pasco, Polk, Putnam, Seminole, Sumter, Volusia, and Washington Counties by Aqua Utilities Florida, Inc.	)	Docket No. 080121-WS
	)	Filed: October 13, 2008

DIRECT TESTIMONY

OF

JAMES A. ROTHSCHILD

On Behalf of the Citizens of the State of Florida

Respectfully submitted,
J.R. Kelly
Public Counsel

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c/o The Florida Legislature
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Attorney for the citizens
Of the State of Florida

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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DIRECT TESTIMONY

OF

JAMES A. ROTHSCHILD

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket No. 080121-WS

I. STATEMENT OF QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is James A. Rothschild and my address is 115 Scarlet Oak Drive, Wilton, Connecticut 06897.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am testifying on behalf of the Office of Public Counsel to provide my recommendations to the Commission regarding the determination of (1) the cost of capital; (2) the cost of equity; and (3) the appropriate capital structure for Aqua Utilities Florida, Inc. I also respond to Aqua Utilities Florida, Inc.'s witness Paul Anzaldo's prefiled direct testimony.

Q. WHAT IS YOUR OCCUPATION?

A. I am a financial consultant specializing in utility regulation. I have experience in the regulation of electric, gas, telephone, sewer, and gas utilities throughout the United States and Nova Scotia, Canada.

Q. PLEASE SUMMARIZE YOUR UTILITY REGULATORY EXPERIENCE.

A. I have been a consultant specializing in utility ratemaking since 1972. Initially, I was employed by Touche Ross & Co. Touche Ross & Co. later merged to form Deloitte Touche. I then provided similar consulting services while with J. Rothschild Associates, Georgetown Consulting Group, and Rothschild Financial Consulting. While associated with the above firms, I have worked for various state utility commissions, attorneys general, and public advocates on regulatory matters relating to regulatory and financial issues. These have included rate of return, financial issues, and accounting issues. (See my resume at Exhibit JAR-2).

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I received an MBA in Banking and Finance from Case Western University (1971) and a BS in Chemical Engineering from the University of Pittsburgh (1967).

II. SUMMARY OF CONCLUSIONS

Q. PLEASE SUMMARIZE YOUR TESTIMONY

A. I recommend an overall cost of capital of 7.05% for Aqua Utilities Florida ("AUF") based upon a cost of equity of 9.47%. This 9.47% cost of equity is only applicable to the cost of capital computed based upon the actual capital structure of Aqua America, Inc. which contains 44.03% common equity.

If the Company's requested common equity ratio is used it would lower the cost f equity to 8.75%. Despite this decrease in the cost of equity the overall cost of capital would increase to 7.37% and balloon higher once taxes are considered

because this 62.31% common equity in the Company proposed capital structure would be grossed up for income taxes. If my recommendation is adopted only 44.03% of the capital structure would be grossed up for income taxes.

The derivation of my recommended 9.47% cost of equity is summarized on my Exhibit __ JAR-1, Schedule 2 and is based on a DCF result of between 9.28% and 9.71%. As part of my determination process I also considered my Risk Premium/CAPM result of 8.68%.

I performed two sensitivity analyzes as a check on my primary recommendation. In one of them I removed Equity Resources from the group of 10 gas companies because it has substantial non-regulated activities related to energy production. If Equity Resources is excluded from the DCF analysis, the indicated cost of equity is between 9.79% and 9.81%. My second sensitivity analysis was to apply the DCF method directly to the financial data of Aqua America, Inc. The DCF indicated cost of equity for Aqua America Inc. alone is between 9.07% and 9.23%.

Aqua America Inc has requested a cost of equity of 10.25% for AUF, which is based on the leverage formula in effect at the Commission's final vote with an overall cost of capital of 8.10% for water and 8.02% for sewer. (See page 1 of 2 of Schedule of Requested Cost of Capital in Mr. Anzaldo's direct testimony.) On page 2 of 2 of this schedule the overall cost of capital is 8.12% for water and 8.06% for sewer based upon 13 month average balance ending December 31, 2006.Rather than base his recommended capital structure on the actual capital

structure being used by Aqua America Inc., Mr. Anzaldo based his recommended capital structure on the thirteen month average of AUF. (See page 2, line 23-24 and page 3, lines 1-2 of Mr. Anzaldo's direct testimony.) It would be inappropriate to assign a higher level of common equity to the capital structure AUF than it is actually using unless such an assignment could be shown to result in a lower, not higher, revenue requirement. I will show later in this testimony that much of what AUF has recorded as equity on its books was really provided by debt that was issued by Aqua America, Inc. and was therefore acquired at a cost rate considerably lower than the cost of equity.

III. COST OF DEBT

Q. WHAT COST OF DEBT IS THE COMPANY REQESTING?

A. The Company has requested a 5.10% cost for long-term debt. According to the Direct Testimony of Mr. Stephen Anzaldo and the Schedule of Requested Cost of Capital, the Company is not requesting any short-term debt. This 5.10% cost of long-term debt is reflective only of the cost of debt that was directly issued by AUF but fails to include the impact on the cost of debt caused by debt issued on AUF's behalf by its parent Aqua America, Inc. As explained elsewhere in this testimony, the debt issued by Aqua America, Inc. that is financing part of AUF's assets should not only be included in the true capital structure of AUF, but should also be included in the embedded cost of debt computation. The 2nd quarter of 2008 10 Q of Aqua America, Inc. shows that of this parent issued short-term debt, $135 million was issued at a cost rate of 4.87%, and another $207 million was issued at cost rates between 5.00% and 5.99%. Since no specific breakdown by

interest rate of this $207 million debt issuance is available in the 10 Q, I cannot make an accurate revision to this 5.10% embedded cost rate. Therefore, for purposes of preparing this testimony, I have used the 5.10% debt cost rate. Based on the interest rate information that is available, it appears that the change to the embedded cost of debt caused by including the parent issued debt would be minimal. However, if the Company chooses to provide a more precise computation of the embedded cost of debt that takes into account an allocation of this parent issued debt, it could be more appropriate to use this revised cost of debt computation.

IV. CAPITAL STRUCTURE

Q. WHAT CAPITAL STRUCTURE HAVE YOU RECOMMENDED IN THIS CASE?

A. I recommend that the cost of capital for Aqua Utilities Florida be based upon the actual fully arms-length capital structure selected by management, i.e. the actual consolidated capital structure of Aqua America, Inc. This capital structure contains 44.03% common equity, 0.00% preferred stock, 52.53% long-term debt and 3.43% short-term debt. See Exhibit ___ JAR-1, Schedule 8. This actual Aqua America, Inc., capital structure should be adjusted to reflect the Florida regulatory basis capital structure. I arrived at this recommended capital structure based on the actual capital structure being used by Aqua America Inc. on a

consolidated basis as of June 8, 2008, that I obtained from the Aqua America Inc. Form 8-K, as of June 8, 2008.

Q. HOW DOES YOUR RECOMMENDED CAPITAL STRUCTURE COMPARE WITH THE CAPITAL STRUCTURE REQUESTED BY THE COMPANY?

A. Aqua Utilities Florida has requested a financial basis capital structure that contains 62.31% common equity and has used that in its implementation of the leverage formula. See page 4, line 4 of Mr. Anzaldo's direct testimony.

Q. WHY DOES AQUA UTILITIES FLORIDA HAVE OVER 62% COMMON EQUITY ON ITS BOOKS WHEN ON A CONSOLIDATED BASIS AQUA UTILITIES, INC. HAS ONLY ABOUT 45% COMMON EQUITY?

A. What is happening can be seen by reviewing the financial statements of Aqua Utilities, Inc. I examined the Aqua America Inc. Form 10-Q quarterly report for the period ended June 30, 2008 that the Company prepared pursuant to section 13 or 15 (d) of the securities exchange act of 1934. Of special interest is the information contained on pages 2 and 5 of this report. Page 2 shows that the total debt of Aqua America, Inc. was

$1,212,423,000. It is this number plus the $7,002,000 current portion of long-term debt that is exactly the same number I used for long-term debt when computing Aqua America's actual capital structure. Page 5 of this same report provides a breakdown of this $1,212,423,000. It shows that of this amount, only $827,121,000 is "Long-term debt of subsidiaries (substantially secured by utility plant)". In addition, the Company also has "Notes payable to bank under revolving credit agreement, variable rate, due May 2012" for $50,000,000; "Unsecured notes payable" due between 2010 and 2037 for a total of $342,132,000 and Notes due in 2008 for $172,000. These notes that total over $392 million are debt financings that the Company has issued, but are not reflected on the books of any of Aqua America, Inc's subsidiaries.

Q. IS THIS $392 MILLON OF DEBT THAT HAS NOT BEEN REFLECTED ON THE BOOKS OF THE REGULATED WATER UTILITY SUBSIDIARIES OF AQUA AMERICA, INC. ACTUALLY FINANCING THE REGULATED UTILITITY OPERATIONS OF AQUA AMERICA, INC?

A. Yes. While no detailed breakdown of utility assets is provided in the 6/30/08 10 Q report, the 2007 10 K report Aqua America, Inc. does provide a breakdown. The 12/31/07 balance sheet for Aqua America, Inc. shows

that the total "Net property, plant and equipment" Aqua America, Inc. had at the time was $2,792,794,000. Page 20 of this same 10K report provides a detailed breakdown of this amount. It shows that all of this property, plant, and equipment is allocated to the regulated water utility subsidiaries of Aqua America, Inc., leaving nothing for unregulated activities. Additionally, page 4 of the same 10K report shows that of the total $602,499,000 of revenues earned by Aqua America, Inc., $589,743,000 or 97.9% of the total revenues of Aqua America, Inc., were earned by its regulated subsidiaries.

Q. IF THE DEBT ISSUED BY AQUA AMERICA, INC. IS ACTUALLY FINANCING THE UTILITY ASSETS ON THE BOOKS OF THE REGULATED SUBSIDARIES, HOW WAS AQUA AMERICA, INC. ABLE TO AVOID SHOWING THE $392 MILLION OF DEBT ON THE BOOKS OF ANY OF ITS REGULATED WATER SUBSIDIARIES?

A. When Aqua America, Inc. issues debt at the parent level, it can take the proceeds of that debt and invest it in its subsidiary companies. If it so chooses, it can use the proceeds of the debt issuance to purchase common stock of its subsidiaries rather than make a loan to its regulated subsidiaries. This procedure has the advantage of making the regulated subsidiaries appear to have more common equity than they actually do.

In the case of Aqua America, Inc. the amount of debt that is masquerading as common equity on the books of the regulated entities totals $392 million.

Q. DOES THE COMMON EQUITY OF THE SUBSIDIARIES APPEAR AS EQUITY ON THE CONSOLIDATED BOOKS OF AQUA AMERICA, INC?

A. No. Because equity that was purchased with debt.

Q. HOW SHOULD THE COMMISSION DETERMINE THE CAPITAL STRUCTURE TO USE IN THE DETERMINATION OF THE OVERALL COST OF CAPITAL APPLICABLE TO THE REGULATED WATER OPERATIONS OF AUF?

A. Especially in these times where the public has lost so much trust in the financial industry, it is important to use the capital structure that fully reflects the actual capital structure financing a utility unless such a capital structure is shown to be more expensive than appropriate. Ideally the Commission should use the capital structure that will balance safety and economy. However, how to determine the capital structure that will produce the lowest overall cost of capital is controversial. Therefore, commissions frequently look to actual capital structures as an indicator of

what capital structures will produce the lowest overall cost of capital. Utility rate regulation is a substitute for competition. Competition puts continual pressure on companies to provide services desired by its customers at the lowest price. To provide services at the lowest price, competitive companies have to minimize all costs, including the cost of capital. The cost of capital can be highly influenced by the capital structure a company uses.

It cannot be stressed strongly enough that the reported capital structure of wholly owned subsidiaries such as AUF does not provide insight into what capital structure management believes will produce the lowest overall cost of capital. I have explained earlier that the subsidiary capital structures of the regulated water companies owned by Aqua America, Inc. contain $392 million of what is reported to be common equity that was actually raised by its parent in the form of debt, not equity. Holding companies with regulated subsidiaries have a special incentive to put extra equity on the books of such regulated subsidiaries when the only point to such excess equity is to rationalize a higher than appropriate revenue requirement.

Please note that Standard & Poor's is specifically aware of the weakest link in the chain of problems associated with a high reported common equity ratio reported on the books of regulated subsidiaries when such extra equity disappears at the consolidated level:

> Utilities are often owned by companies that own other, riskier businesses or that are saddled with an additional layer of debt at the parent level. Corporate rating criteria would rarely view the default risk of an unregulated subsidiary as being substantially different from the credit quality of the consolidated economic entity (which would fully take into account parent-company obligations). Regulated subsidiaries can be treated as exceptions to this rule – if the specific regulators involved are expected to create barriers that insulate a subsidiary from its parent.

Corporate Rating Criteria obtained from the Standard & Poor's

Myron J. Gordon, famous as the first person to use the DCF model in utility rate proceedings, said the following regarding capital structure in his direct testimony in an American Telephone and Telegraph case:

> For a regulated company increasing the debt ratio is a heads-you-win-tails-I-lose proposition. The consumers enjoy the benefits in reduced revenue requirements of a high debt ratio, while the management and stock-holders suffer the increased risk. The consequence is that the management of a regulated company will want the lowest possible debt ratio that it can persuade the regulatory commission to accept, **and a commission that simply**

accepts the debt ratio advocated by a utility subject to its regulation is derelict in its responsibilities to consumers.

Re American Telephone and Telegraph Company. CC Docket No. 79-63, 1980

V. DISCOUNTED CASH FLOW METHOD

Q. WHAT IS THE DISCOUNTED CASH FLOW (DCF) METHOD?

A. The DCF method is a mathematical formula that is used to value a stock and to calculate the cost of equity. It recognizes that investors who buy a stock due so to receive cash dividends and/or capital gains in the future, considering the time value of money.

Q. WHAT IS THE TIME VALUE OF MONEY?

A. The time value of money is just another way of saying that money can earn interest. The concept recognizes that because money can earn interest, a dollar received today is worth more than a dollar received tomorrow, a dollar received tomorrow is worth more than a dollar next year, and so on. For example, if an investor puts $100 in a bank account that offers a 3% annual compounded interest rate, the investor will have $103 a year later and $106.09 in two years. If the only investment opportunity is to put money in this bank offering a 3% interest rate then that $103 next year is worth $100 today.

If a company offers an investor $100 in ten years or $80 today, the DCF method helps answer the question of which amount the investor should take. If the only investment opportunity for the investor is to put the money in a bank earning 3%

interest, it is known that $100 in ten years is equivalent to $74.40 today ($100/(1.03)^10). The DCF method guides the investor to the correct answer, which is to take the $80 because it is higher than the $74.40.

In the above example the discounted cash flow (DCF) method discount rate was 3%.

Q. IS THE DISCOUNT RATE HIGHER WHEN AN INVESTOR VALUES A STOCK THAN WHEN INVESTING IN AN FDIC INSURED BANK ACCOUNT?

A. Yes. The FDIC insured bank account is virtually certain to pay the interest and not default on the investor's deposit. On the other hand investing in stocks involves risk because the quality of management, competitive surprises or overall economic conditions all impact a company's ability to generate cash flow in the future.

Q. WHAT IS THE RELATIONSHIP BETWEEN THE DISCOUNT RATE AND THE COST OF EQUITY?

A. The discount rate investors' use when calculating the value of a stock is equal to the cost of equity.

Q. HOW ARE INVESTORS PAID THE COST OF EQUITY?

A. In addition to receiving dividends the investor has the option to sell the stock. The profit investors receive from selling stock is generally referred to as capital gains.

Q. WHAT ARE CAPITAL GAINS?

A. A capital gain, or loss, is the difference between what an investor pays for a stock and the final selling price. For example, if an investor pays $20 for a stock this year and sells it for $21 in three years time, the capital gain is equal to $21 - $20 or $1.

Q. IS IT ACCEPTABLE TO ARRIVE AT A COST OF EQUITY FROM THE DCF MODEL THAT COULD CAUSE THE STOCK PRICE OF A COMPANY TO CHANGE?

A. Yes. This principle is a key point of the City of Cleveland vs. Hope Natural Gas U.S. Supreme Court decision. In this landmark case, the U.S Supreme Court said:

> The fixing of prices, like other applications of the police power, may reduce the value of property which is being regulated. But the fact that the value is reduced does not mean that the regulation is invalid. It does, however, indicate that "fair value" is the end product of the process of rate-making not the starting point.... The heart of the matter is upon "fair value" when the value of the going enterprise depends on earnings under whatever rates may be anticipated.

Q. WHAT IS THE PRINCIPLE BEHIND THE DCF METHOD?

A. An investor parts with his or her money to receive dividends and then sells the stock to someone else. The price the new owner is willing to pay for the stock is related to the future flow of dividends and future selling price he or she expects to receive. The value of a company is recognized to be the discounted value of all future dividends continuing until the stock is sold, plus the value of the stock sale proceeds when it is eventually sold.

For example, if the cost of equity is 9% and the dividend is $1 per share then that one-dollar dividend paid out next year is worth $1/(1+.09) or $0.92 today. This means that the $0.92 of the current stock price is accounted for by the dividend expected to be paid one year from today. In addition to receiving a dividend for next year an investor might also expect a dividend in the second year of owning the investment. If that dividend were also $1 then in terms of today's value of that dividend in the second year that $1 is now worth $1/ (1.09) ^2 = $0.84. If by the third year it's expected the dividend will jump to $1.50 then the contribution to today's stock price from this $1.50 is $1.50(1.09)^3 = $1.16. This analysis continues year by year for as many years as the investor expects to own the stock. This relationship can be generalized by the following mathematical equation:

The current stock price P is equal to: D1/(1+k) + D2/(1+k)^2 + D3/(1+k)^3 +.... (Dn + Pn) X (1+k)^n.

P = Current stock price
D1 = Dividend paid out in the first year
D2 = Dividend paid out in the second year
D3 = Dividend paid out in the third year
Dn = Dividend paid out in the nth year
k = the opportunity cost of capital or the require return.
Pn = the sale price of the stock

This complex version of the DCF equation can be used to solve for the cost of equity by estimating the dividend each year and what price the stock will be sold for and then having the computation solve for the cost of equity, k.

Q. DOES THE POTENTIAL FOR A CHANGE IN THE FUTURE EXPECTED RETURN ON BOOK EQUITY MAKE THE DCF MODEL CIRCULAR?

A. No. It is not circular because the DCF computations are all taken from a point in time before investor expectations change. Such an approach is therefore no more circular than a ship captain who, by looking at his compass, determines that his ship is sailing 10 degrees too far South, so he turns the ship to have the very same compass turn back to the true course.

Q. IS IT ALWAYS NECESSARY TO USE THIS COMPLEX FORM OF THE DCF METHOD?

A. No. If the best estimate for future growth in earnings, book value, dividends and stock price is the same estimate then and only then does the complex formula becomes mathematically identical to the answer obtained by the following equation:

$k = D/P + g.$

Q. WHAT IS THE SIMPLIFIED VERSION OF THE DCF METHOD?

A. In the simplified version the cost of equity k is equal to the dividend yield plus growth.

$k = D/P + g$

k = Cost of equity

D/P = Dividend Yield (D = dividend and P = stock price)

g = Growth in earnings, dividends, book value and stock price expected by investors.

In the mathematical duration of this simplified DCF model growth, g = Future Expected Return on Book Equity (ROE) X Retention Rate + SV. SV is the growth caused by the sale of new common stock at a price different from book value.

The retention rate is the percentage of earnings not paid out as a dividend. If a stock price is $20 per share and the investor receives a $1 dividend per year the dividend yield is 5% ($1/$20).

$k = 5\% + g$

If there was no growth then we could say that k = 5%.

$k = 5\% + 0\%$

When a company generates earnings it chooses how much to pay out to stockholders and how much to re-invest in the company. In the above example the retention rate is zero and 100% of the earnings are paid out as a dividend.

Companies usually do not pay 100% of earnings as a dividend. The percentage of earnings not paid out as a dividend benefits investors because this portion is re-invested in the company. Whatever percentage of earnings that are re-invested in the company is called the retention rate. For example, if half the earnings are re-invested the retention rate is 50%. The retained earnings are re-invested in the

company because management presumably believes there are good investments they can make with that money. The investors' expectation of the returns on this re-invested money is the Return on Book Equity (ROE), not the cost of equity r.

As stated earlier, growth is equal to ROE X Retention Rate. For example if investors expect an ROE of 8% and a 50% retention rate the growth is equal to 4% (50% X 8%).

Q. IS IT ALWAYS APPROPRIATE TO USE THE SIMPLIFIED VERSION OF THE DCF METHOD?

A. No. In order to use the simplified version, our best estimate must be that the following factors will grow at the same rate:

a) Earnings

b) Book Value

c) Dividends

d) Stock Price

If these are all expected to grow at the same rate, then growth (g) will be equal to ROE X retention rate.

Q. CAN YOU PROVIDE AN EXAMPLE WHERE IT IS NOT APPROPRIATE TO USE THE SIMPLIFIED VERSION OF THE DCF METHOD?

A. Yes. If our best estimate is that earnings per share and stock price will grow at 6% per year while dividends per share will grow at 3% per year and book value

per share will grow at 4% per year then the simplified version of the DCF method should not be used.

In Exhibit ___ JAR-1, Schedule 9, I have attached a Table 1 that reflects that the dividend yield decreases from 5.30% in 2007 to 4.73% in 2011. In this case it is not proper to use either the 5.30% or the 4.73% in the simplified formula. Taking an average over any given time period is also improper because the dividend yield keeps decreasing in the future. In the Table 1 shown on Schedule 9, return on book equity increases from 10.19% in 2007 to 11.00% by 2011. It is unrealistic to expect any company, let alone a regulated public utility, to have a return on book equity that increases indefinitely.

Q. PLEASE PROVIDE AN EXAMPLE OF A CONDITION WHERE IT IS APPROPRIATE TO USE THE SIMPLIFIED VERSION OF THE DCF METHOD.

A. In Table 2 from Exhibit ___ JAR-1, Schedule 9, the growth rate is equal to 4% for earnings per share, book value per share, stock price and dividend per share. The 4% is calculated by multiplying ROE X Retention Rate. The starting point of the table shows earnings per share at $1, book value per share is $10, stock price is $11 and dividends per share is $0.60. The retention rate r is equal to 40%. It was calculated by taking $1 (earnings per share) minus $0.60 (dividends per share) and then dividing by $1 earnings per share. The ROE is equal to 10%, $1 (earnings per share) divided by $10 (book value per share). So, ROE X Retention Rate is equal to 4% (40% retention rate X 10% ROE).

Table 2 on Schedule 9 shows that if earnings per share, book value per share, stock price and dividends per share all grow at 4% then book value per share grown at 4% is equal to earnings per share minus dividends per share plus the last year's book value for every year.

All of the components must grow at a rate equal to ROE X Retention Rate. If any of these components grow at a different rates, or anything other than ROE X Retention Rate then problems such as permanently increasing or decreasing dividend yield can occur, creating problems that ensure an inaccurate answer from the DCF model.

Q. IS IT ALWAYS NECESSARY TO REJECT THE CONSTANT GROWTH FORM OF THE DCF METHOD FOR A COMPANY WITH ANY FORECASTED NON-CONSTANT GROWTH FACTORS?

A. No. It can be possible to still arrive at a reasonable estimate for the cost of equity using the constant growth form of the DCF model so long as the inputs are treated in a manner consistent with constant growth. For example, if the dividend rate used to compute the dividend yield is used to determine the retention rate, then the computation is the same as if dividends were to grow at the same rate as earnings, dividends and book value.

Q. IS THE APPROACH YOU HAVE DESCRIBED TO MAKE THE INPUTS INTO THE CONSTANT GROWTH DCF AN ABSOLUTELY PERFECT SOLUTION?

A. No. However, it is the most accurate way to fit a non-constant growth situation into a constant growth DCF formula. It is considerably more accurate than haphazard approaches such as adding a five-year earnings per share growth rate to the current dividend yield. Being true to the mathematical demands of the constant growth DCF model is an essential step to using it properly and therefore maximizing its accuracy.

Note the self-correcting nature of the approach to the constant growth DCF that I have described:

A) Suppose a company is expected to grow dividends less rapidly than earnings simply because management plans to invest a larger portion of earnings in the future. This change would lower the expected dividend yield and raise future growth. The least accurate way to handle this situation would be to use the higher expected growth without making a corresponding reduction to the dividend yield. The approach I have used does not make that mistake, while a simplistic approach of merely adding a five-year earnings per share growth rate to an historical dividend yield does make that mistake.

B) Suppose a company is expected to undergo a temporary rapid increase because the base period has a lower than sustainable earned return on book equity, by equating the retention rate based not only on the actual dividend but on the earnings rate that would have existed if the future expected earned return on equity had been earned, the higher and more sustainable growth rate is computed. However, unsustainable transitional growth derived from a time when return on

equity is changing substantially, i.e. earnings on book is non-constant. The approach I have used remains correct, while a simplistic approach of merely adding a five-year earnings per share growth rate to an historical dividend yield would be invalid.

Q. DOES THE CONSTANT FORM OF THE DCF MODEL ASSUME THAT THE STOCK PRICE WILL BE EQUAL TO BOOK VALUE?

A. No. Stock price and book value are modeled to grow at the same rate. If book value and stock price grow at the same rate, the market-to-book ratio must be expected in the DCF model to remain constant rather than gravitate to some higher or lower value in the future.

Q. IS THE ACCURACY OF THE ANSWER OBTAINED FROM THE DCF MODEL INFLUENCED BY THE MARKET –TO-BOOK RATIO PREVAILING AT THE TIME OF THE ANALYSIS?

A. No. The accuracy of the DCF result is driven by the accuracy of future cash flow estimates. There is no reason to believe the accuracy of a future cash flow projection is inherently more or less difficult to make for a company with a market-to-book ratio of 0.80, 1.0 or 2.0.

Q. IF THE COST OF EQUITY COMPUTED BY THE DCF MODEL IS DIFFERENT THAN THE RETURN ON EQUITY USED TO COMPUTE GROWTH, DOES THIS CAUSE ANY PROBLEMS?

A. No. The cost of equity is the return investors expect to receive on their investment at market price, while the return on equity used to compute growth is

equal to the return investors expect a company will be able to earn on its book value at the time the DCF computation was being made. Since market-to-book ratios are rarely exactly equal to 1.0, the return on market price expected by investors is rarely equal to the return on equity investors expect will be achieved on book value.

Q. COULD A COMMISSION'S COST OF EQUITY DECISION CHANGE INVESTOR'S EXPECTATION FOR THE FUTURE RETURN ON BOOK VALUE?

A. Yes. However, it is highly unlikely that any one commission's decision could have a material impact on the future expected return on equity for a comparative group of utility companies. Nevertheless, if a commission's decision were to change investors' expectation of future return on book equity, it could cause numerous inputs in the DCF model to change. The stock price would change in response to a higher or lower dividend rate and an increased or decreased expected growth could cause investors to change their future expected return on book equity.

Q. HOW DID YOU OBTAIN THE GROUP OF COMPARATIVE COMPANIES THATA YOU USED IN THIS CASE?

A. I used the same companies that this Commission has selected for use in the determination of the leverage formula. In reviewing this group of gas companies, I was especially concerned that Equitable Resources was significantly different than the rest of the group. It has a much higher market-to-book ratio, a considerably higher future expected return on book equity, and its overall

business is indicated by Value Line to be oriented towards the production, storage and drilling. In Value Line's September 12, 2008 issue it says, "Equitable Resources has been performing well. Leading the way has been Equitable's production unit," and "Drilling activity has yielded promising results."

Q. HOW DID YOU CALCULATE THE DIVIDEND YIELD, D/P?

A. I obtained the most recent quarterly dividend for each of the gas companies. For each company I estimated their annual dividend payments by multiplying the most recent quarterly dividend by 4.

From Yahoo Finance I obtained the monthly closing prices for all of the comparative gas companies. For every company, I divided the annual dividend payments by their closing stock price for the year ending 8/31/08 to get the dividend yield per company. The dividend yields for these gas companies is based on the year end stock price averaged 3.61% (See Exhibit ___ JAR-1, Schedule 4, page 1).

I also calculated the average dividend yield for the year for the gas company group by dividing the same dividend payment by the average of the high and low monthly closing stock prices of the past 12 months to get dividend yields. The average dividend yield computed on this basis was 3.70% (See Exhibit ___ JAR-1, Schedule 4, page 1)

Q. HOW DID YOU CALCULATE THE GROWTH (g) PORTION OF YOUR DCF ANALYSIS?

A. For each company I calculated growth component by solving for Future Expected Return on Book Equity multiplied by Retention Rate. I then added an allowance for growth caused by the sale of new common stock above book value.

Q. HOW DID YOU ESTIMATE THE FUTURE RETURN ON BOOK EQUITY EXPECTED BY INVESTORS?

A. I estimated the future expected return on book equity by reviewing the return on book equity published by Value Line, and considering that forecast in the context of historic actual returns on equity.

Q. HOW DID YOU DETERMINE THE RETENTION RATE?

A. I calculated the dividend yield on book by multiplying the dividend yield on market price by the market to book ratio. I multiplied this dividend yield on book number by the future expected return on book equity to get the retention rate. (See Exhibit ___ JAR-1, Schedule 3)

Q. HOW DID YOU DETERMINE THE SALE OF NEW COMMON STOCK?

A. I used the most current issue of Value Line to obtain the amount of stock outstanding in 2007 and the number of shares forecasted to be outstanding in 2011-2013. I calculated the compound annual growth rate between 2007 and the 2011-2013 time frame for the comparative gas group. (See Exhibit ___ JAR-1, Schedule 5.)

Q. PLEASE SUMMARIZE YOUR DCF RESULTS?

A. The results of my DCF analysis can be seen on Exhibit ___ JAR-1, Schedule 2. The average dividend yield for the comparative gas companies is 3.61% to 3.70%. The average growth rate of these companies is between 5.83% and 6.31%. To account for dividend growth for next year, 0.11 is added. The DCF method is indicating a cost of equity of between 9.64% and 10.03%. (See Exhibit ___ JAR-1, Schedule 3.)

VI. CAPTAL ASSET PRICING MODEL

Q. WHAT IS THE CAPITAL ASSET PRICING MODEL (CAPM)?

A. The capital asset pricing model is a method for calculating the cost of equity for a stock by adding a risk premium to a risk free rate. The risk premium appropriate for a group of companies is proportional to the "beta" of that group.

$$COE = Rf + B \times (Rm - Rf)$$

COE = Cost of equity

Rf = Risk free rate

B = Beta

Rm = the expected return on the market

Q. WHAT IS A RISK FREE RATE?

A. The risk free rate is theoretically a rate that investors receive for investing in a security that has no chance of unexpected price fluctuations. Short-term U.S. government treasury bills are often used to estimate this risk free rate because

their default risk is close to zero and because the time to maturity is so short that unexpected price fluctuations from changes in the interest rates are minimal.

Q. CAN THE RATE OF A LONGER TERM BOND YIELD LIKE A 20-YEAR TREASURY BILL, ALSO BE USED AS A RISK FREE RATE?

A. While a longer-term Treasury bond could be used in a risk premium analysis, a 20-year Treasury bond is not truly risk free because it is subject to interest rate risk. For example, an investor buys a 20-year U.S. Treasury bond that is yielding 5% and then interest rates rise to 6% the price of a 20-year Treasury bond will decrease, substantially. Therefore, if a 20-year Treasury bond is used in a CAPM analysis, it should be used in a way that recognizes the non-risk-free nature of this 20-year U.S. Treasury bond.

Q. WHAT IS A RISK PREMIUM?

A. The risk premium is the return that investors demand to take on additional risk. The risk premium can be the difference between any financial instrument in different risk categories such as the difference between U.S. Treasury bonds, corporate bonds, preferred stock or common stock.

Q. WHY DO INVESTORS DEMAND A RISK PREMIUM TO INVEST IN STOCKS?

A. Investors prefer avoiding uncertainty. They will seek investments with uncertainty if an opportunity is perceived to receive adequate compensation for taking on the additional risk.

Q. FOR WHAT TYPE OF RISK DO INVESTORS DEMAND COMPENSATION?

A. The only type of risk that investors demand compensation for is the risk that cannot be eliminated through diversification. Investors buy stocks as part of a diversified portfolio. The portfolio effect causes the diversifiable risks of each company to cancel out – unexpected problems are offset by unexpected success. After all of the diversifiable risks of all the companies in an investor's portfolio cancel out, then only non-diversifiable risk remains. Even a well-diversified portfolio can be harmed by a worldwide recession or a sudden shortage of oil.

Q. WHAT IS BETA?

A. Beta is a measurement of the correlation between a given stock and the market as a whole. A portfolio made up of companies with a beta that averages 1.0 tends to have price swings that match the market in magnitude. A portfolio with an average beta of 1.5 tends to move 1.5% for every 1% the market moves. A portfolio with average beta of 0.8 tends to move 0.8% for every 1% the market moves.

Q. DO ALL COMPANIES REQUIRE THE SAME RISK PREMIUM?

A. No. There are companies that are more sensitive than others to non-diversifiable risks such as changes in the economy. A portfolio more heavily weighted with companies that are especially impacted by the market will generally require a higher risk premium than a low risk portfolio. For example, a portfolio heavily weighted with stocks that sell luxury items may be harmed dramatically if disposable income goes down because such products are the first to go in hard

times. Conversely, a portfolio heavily investing in companies that make a staple products like utilities, corn flakes or soap is likely to be less susceptible to changes in the economy, have more stable stock prices and therefore require a lower risk premium.

Q. HOW DID YOU APPLY THE CAPM?

A. I compared the actual compounded annual returns earned by each of 10 groups of companies from 1926-2007 with an average beta of each group. In this way, I effectively examined the returns on ten different portfolios, each with a different average beta. Graph 1 shows that on average from 1926-2007, companies with a beta of 1.0 earned a compounded annual return of 10.40% for its equity investors. The average beta for the comparative gas companies is 0.83, indicating that the non-diversifiable risk for these gas companies is 83% of the average risk. The least squared equation indicates that the earned return to stockholders who invested in a portfolio with a beta of 0.83 earned a compounded annual return of 8.68% from 1926-2007.

The 10.40% compounded annual average historical actual return earned by companies with a beta of 1.0 and a 9.42% historical actual return earned by companies with 0.83 occurred over a time when the compound annual rate of inflation averaged 3.0%. However, the current inflation expectation demanded by investors is 2.26% (see Exhibit ___ JAR-1, Schedule 6, page 1), or 0.74% lower than the inflation rate embedded in the historical actual return numbers. Therefore, to make the historical returns consistent with investors' current inflation expectations, the 9.42% should be reduced by 0.74%. This 9.42% return

adjusted for the current inflation expectation results in a 8.68% CAPM indicated cost of equity for gas companies with a beta of 0.83.

Q. ARE COMPOUNDED ANNUAL RETURNS THE SAME AS THE GEOMETRIC MEAN?

A. Yes

Q. IS THE COMPOUND ANNUAL AVERAGE RETURN, OR GEOMETIC MEAN, A BETTER MEASURE OF ACTUAL HISTORICAL RETURNS AND WHAT INVESTORS EXPECT TO EARN IN THE FUTURE THAN THE ARITHMETIC MEAN?

A. Yes. Page 24 of Stocks for the Long Run, Third Edition contains the following:

> Investors can be expected to realize geometric returns only over long periods of time. The average geometric return is always less than the average arithmetic return except when all yearly returns are exactly equal. The difference is related to the volatility of yearly returns.
>
> A simple example demonstrates the difference. If a portfolio falls by 50 percent in the first year and then doubles (up 100 percent) in the second year, "buy and hold" investors are back to where they started, with a total return of zero. The compound or geometric return rG, defined earlier as (1-.5)(1+1)-1, accurately indicates the zero total return of this investment over two years.
>
> The average annual arithmetic return rA is +25percent =(-50 percent + 100 percent)/2. Over 2 years, this average return can be turned into a compound or total return only by successfully "timing" the market, specifically increasing the funds invested in

the second year and hoping for a recovery in stock prices. Had the market dropped again in the second year, the strategy would have been unsuccessful and would have resulted in lower total returns than achieved by the buy-and-hold investor.

Q. WHAT GROUP OF COMPANIES DID YOU USE IN YOUR CAPM ANALYSIS?

A. I relied on the Ibbotson Associates data from their 2008 Yearbook that includes 3,901 companies.

Q. HOW DID YOU DIVIDE THESE COMPANIES INTO TEN PORTFOLIOS?

A. The only data available in the Ibbotson Associates report with the companies it covers divided into separate portfolios are these ten groups that were divided by size. Since these ten groups all had significantly different betas and because the actual historical earned returns for these groups was also quantified, it was possible to use these groups to show how beta related to the actual earned return earned by each of these groups. It was acceptable to use the portfolios consisting of different size companies in this analysis because:

1) By CAPM theory, size is a diversifiable risk and therefore does not impact the cost of equity.

2) The results themselves confirm that size does not matter because the least squares trend line projects to a credible risk-free rate. If size, in addition to beta, did actually influence the cost of equity, then the projection of the data would be

substantially different than the cost rate expected for a zero risk security (i.e., a security with a beta of zero.)

Q. WHAT DID YOU USE FOR A RISK FREE RATE?

A. The most accurate risk free rate to use with this analysis is the one that is defined by the data itself. That way, the true historical actual relationship between beta and the cost of equity is maintained.

Q. WHAT IS THE RELATIOSHIP BETWEEN THE COMPOUNDED ANNUAL EARNED RETURN AND BETA FOR THE GROUP OF COMPANIES YOU SELECTED?

A. The data points in the graph shown on Exhibit JAR-1, Schedule 6, are numbered from highest to lowest beta, with number 1 being the group with the lowest beta and number 10 being the group with the highest beta. A least squared line was used to fit a line to the data points and the derived equation was used to calculate the returns for a given beta. Historically a company with a beta of 1 has earned a return of about 10.40%. A company with a beta equal to 0.83, the average beta of the comparative gas companies, has earned approximately 9.42%.

Q. DOES THE GRAPH OF THE RELATIONSHIP BETWEEN BETA AND RETURNS SHOWN ON SCHEDULE 6 HELP CONFIRM THE CAPM THEORY?

A. Yes. The equation of the least squares line is $Y = .059922 X + 0.0445$ so the line indicates a y-intercept (or security with a zero beta) of 4.45%. Theoretically a

firm with a zero beta is a risk free security. The compound annual return actually achieved by investors in U.S. Treasury Bills from 1926-2007 was 4.70%, or only 25 basis points higher than the result consistent with the actual return versus actual beta data used in my CAPM analysis. This small difference is an excellent confirmation of the integrity of the CAPM theory.

Q. DO THESE HISTORICAL ACTUAL RETURNS FROM 1926-2007 AUTOMATICALLY EQUATE TO THE COST OF EQUITY?

A. No. The cost of equity at any given risk level is directly influenced by investors' expectations of future inflation rates, while the historical data is a product of the inflation rates that existed in the past. The compounded annual rate of inflation between 1926 and 2007, the time period from which that data used to construct this graph was compiled, inflation averaged 3.0%. Currently however the bond market shows that investor's inflation expectation is 2.26%. Since the returns demanded by investors include an allowance for inflation, it is appropriate to update the historical actual returns to be consistent with what investors currently demand for inflation. Since inflation expectation is 0.74% lower than it was from 1926-2007, the cost of equity is appropriately estimated to be 0.49% lower at all risk levels than it was on average from 1926 to 2007. The current cost of equity for the gas group with a beta of 0.83 is 8.68%.

Q. HOW DID YOU CALCULATE WHAT THE MARKET EXPECTS INFLATION TO BE AS OF 8/31/08?

A. I took the difference between 20-year US treasury bonds and the long-term inflation indexed treasury bonds. The yield on the 30-year US Treasury bonds is

4.43% (www.bloomberg.com/markets/rates/index.html) and the yield on the inflation-indexed bonds is 2.17%. (www.bloomberg.com/markets/rates/index.html). Since the market is willing to accept a 2.17% yield instead of a 4.43% yield in return for protection against inflation, the market expects inflation to be 2.26% (4.43% - 2.17%).

Q. DOES THEORY AND EMPIRICAL DATA SUPPORT YOUR FINDINGS?

A. Yes. The CAPM theory says the relationship between the cost of capital and beta is linear. In the financial textbook *Investments* (McGraw-Hill/Irwin 2005), by Bodie, Kane and Marcus it states on page 290 that "...fairly priced' assets plot exactly on the SML..." and, "...all securities must lie on the SML in market equilibrium. " As seen in Graph 1 on Schedule 6, page 3 of 4, the stock based empirical data is consistent with the theory that higher betas correlate with higher returns. The term Security Market Line (SML) is given to the expected return-beta relationship.

If this historical actual earned return being is consistent with what investors' expected and if the CAPM theory is correct, it is possible to estimate the risk-free rate that existed on average over the 1926-2007 period by making a linear projection of the historical stock returns. As shown on my graph #1, the stock based empirical data results in a computed risk-free rate of 4.45% (note: Because of the limitations the graph it appears 4.00% but the formula clearly shows the intercept to be 4.45%). This is very close to the actual 4.6% compounded annual return of U.S. Treasury Bills.

Q. IS THE U.S. TREASURY BILL YIELD A GOOD ESTIMATE OF THE RISK FREE RATE?

A. On average for the long-term, it is. However spot distortions are common. The current rate on the 90-day U.S. Treasury is 1.72% as of 8/31/08, and 0.92% as of 9/30/08. It is lower than the long-run average because Fed Chairman, Ben Bernanke, has been reducing interest rates in an attempt to stimulate the economy.

Q. HOW DOES YOUR CAPM RESULT COMPARE TO THE RESULTS STATED IN IBBOTSON ASSOCIATES?

A. On page 179 of "Stocks, Bonds, Bills and Inflation" Ibbotson SBBI/Morningstar 2008 yearbook, the authors conclude:

> The supply side model estimates that stocks will continue to provide significant returns over the long run, averaging around 9.66% per year, assuming historical inflation rates. The equity risk premium, based on the supply side earnings model, is calculated to be 4.24% on a geometric basis and 6.23% on an arithmetic basis.

In the above statement, the 9.66% return expected by Ibbotson SBBI/Morningstar is based on a stock of average risk. Based on historical inflation rates the expected return I calculate for a company of average risk at 10.4% is higher than the 9.66% concluded by Ibbotson SBBI/Morningstar. Considering that inflation expectations are lower than the historical average and the group of 10 gas companies has a lower risk than the company of average risk, my finding of a 8.68% CAPM cost of equity is consistent with both the historical data and the SBBI/Morningstar's forecast.

Q. IS THERE ANOTHER IMPORTANT VERIFICATION OF THE CAPM CONCLUSION YOU HAVE RECOMMENDED?

A. Yes. Page 12 of Stocks for the Long Run by Wharton Professor, Jeremy Siegel, concludes that "... the real after-inflation, compound annual rate of return on stocks...real return on stocks... averaged 6.9 percent per year since 1926." The book also points out that this real after-inflation return on stocks has been "...extraordinarily stable..., averaging 6.6 percent from 1871 through 1925..." and the book mentions that the return since World War II was 7.1 percent. Recognizing that the return data prior to 1926 contains many fewer companies and is in a much less mature economy than the data since 1926, I will concentrate on the inflation premium data after 1926 and will therefore conclude that the equity premium in excess of inflation for the average common stock in the U.S. is 7.1%. Adding the current inflation expectation derived from the bond market of 2.26% results in a cost of equity estimate of 9.36% for a company of average risk. This result is virtually identical to the 9.66% estimate made by Ibbotson Associates, further confirming that my 10.4% CAPM estimate based on the results for the average stock is conservatively high.

VII. EVALUATION OF THE TESTIMONY OF MR. ANZALDO

Q. PLEASE EXPLAIN WHAT MR. ANZALDO RECOMENDS.

A. Mr. Anzaldo, on page 4 of his direct testimony, has recommended that AUF be allowed a return on equity of between 10.25% based on the leverage formula in effect at the time of the Commission's final vote. On page 4, lines 17-21 Mr. Anzaldo's direct testimony that approximately 60% common equity and 36% debt

is "appropriate for AUF." And that AUF's size and lack of growth dictate a higher common equity ratio than a "typical water company."

Q. DO YOU AGREE WITH MR. ANZALDO'S COST OF EQUITY RECOMMENDATION?

A. No. As explained earlier in my testimony I believe that the cost of equity for AUF is 9.47% with a common equity ratio of 44.03%. If the Commission chooses to use a higher than justifiable common equity ratio of 62.31% the cost of equity would decrease to 8.75%. Such a low percentage of debt in the capital structure would have significantly lower risk than the proxy group of 10 case companies I used to calculate the cost of equity in my.

Q. DO YOU AGREE WITH MR. ANZALDO'S CAPITAL STRUCTURE RECOMMENDATION?

A. No. Mr. Anzaldo See page 4 of Mr. Anzaldo's direct testimony uses a 13-month average basis for AUF. The parent, Aqua America Inc.'s operations are almost 100% regulated. Also, as explained earlier in this testimony, the books of Aqua America, Inc. contain $392 million of debt financing that has been used to finance the equity of its regulated water utilities. Therefore, the cost of that portion of what has been reported on the books of AUF has been obtained at a cost of debt rate, not a cost of equity rate. As of June 8, 2008 Aqua America Inc. has a common equity ratio of 44% and that is the ratio that should be used in this proceeding.

Q. PLEASE RESPOND TO MR. ANZALDO' COMMENT ON THE SIZE OF

AUF HAVING AN INFLUENCE ON THE COMMON EQUITY RATIO.

A. Mr. Anzaldo presented no evidence that capital structure is related to size. He did not even claim that capital structure is somehow a function of size among the various regulated water subsidiaries of Aqua America, Inc. AUF is part of the Aqua America, Inc. system. Its effective capital structure and capital cost rates are therefore a function of the overall system. If the savings from creating the entire system were not passed on to Florida ratepayers, the effect would be for Aqua America, Inc. to earn a considerably higher return on equity than was intended by the Commission.

VIII. CONCLUSION

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THIS CASE.

A. The overall cost of capital that should be allowed to AUF in this proceeding is 7.05% (9.60% pre tax). See Exhibit ___ JAR-1, Schedule 1. This 7.05% overall cost of capital is based upon a cost of equity of 9.47% with a 44.03% common equity ratio. Alternately, if a higher common equity ratio were used, then the cost of equity would be lower.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

CERTIFICATE OF SERVICE
DOCKET NO. 080121-WS

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by U.S. Mail to the following parties on this 13th day of September, 2008.

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OVERALL COST OF CAPITAL

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
Overall COC
Schedule 1
Page 1 of 1

Capital Structure and Cost Rates ***Recommended Capital Structure***	Ratios	Cost Rate	[E] Weighted Cost Rate	[F] Pre Tax Cost Rate
Long-Term Debt	52.53% [A]	5.10% [B]	2.68%	2.68%
Short-Term Debt	3.43% [A]	5.90% [C]	0.20%	0.20%
Common Equity	44.03% [A]	9.47% [D]	4.17%	6.72%
	100.0%		7.05%	9.60%

Capital Structure and Cost Rates ***Capital Structure Requested by the Company***	Ratios	Cost Rate	[E] Weighted Cost Rate	[F] Pre Tax Cost Rate
Long-Term Debt	**37.69%** [G]	**5.10%** [B]	1.92%	1.92%
Short-Term Debt	**0.00%**		0.00%	
Common Equity	**62.31%** [B]	8.75% [D]	5.45%	8.78%
	100.0%		7.37%	10.70%

Sources:

[A] JAR-1 Schedule 8 (Figures from June 30, 2008)
[B] Direct Testimony of Mr. Stephen Anzaldo, Page 4
[C] Aqua America Inc. 10K (Management's Discussion and Analysis of Financial Condition and Results of Operations, page 40)
[D] JAR-1 Schedule 2
[E] Cost Rate x Ratio
[F] 1.61 X Cost Rate.
[G] 1 - Common Equity Ratio

AQUA UTILITIES FLORIDA, INC.
COST OF EQUITY SUMMARY

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
Cost of Equity Summary
Schedule 2
Page 1 of 1

SIMPLIFIED, OR CONSTANT GROWTH DCF (D/P +g) RESULTS:	**Average for Year ending 8/31/08**		**As of 8/31/2008**	
Based upon 10 Gas Companies Covered by Value Line				
(Same Companies used in Florda's Leverage Graph Calculation)	9.28%	[A]	9.71%	[A]
Based upon 9 Gas Companies (Same as 10 but excluding Equitable Resources)	9.79%	[B]	9.81%	[B]
Aqua America Inc.	9.23%	[C]	9.07%	[C]
Risk Premium				
Capital Asset Pricing Model			8.68%	[D]
Based upon 10 Gas Companies Covered by Value Line				
(Same Companies used in Florda's Leverage Graph Calculation)				

Recommended Equity Cost Rate Finding	9.25%	[E]
Indicated Cost of Equity	9.25%	

BASED ON RECOMMENDED CAPITAL STRUCTURE

Recommended Equity Cost Rate Finding	9.25%	
Allowance for risk for Capital Structure with 44% Common Equity versus comparative group's 49.62%.	0.22%	[E]
Indicated Cost of Equity	9.47%	

BASED ON COMPANY REQUESTED CAPITAL STRUCTURE

Recommended Equity Cost Rate Finding	9.25%	
Allowance for risk for Capital Structure with 62.31% Common Equity versus comparative group's 49.62%.	-0.50%	[E]
Indicated Cost of Equity	8.75%	

Sources:

[A] JAR-1 SCHEDULE 3, Page 1
[B] JAR-1 SCHEDULE 3, Page 2
[C] JAR-1 SCHEDULE 3, Page 3
[D] JAR-1 SCHEDULE 6, Page 1
[E] Based on estimate of 0.04% change in cost of equity for each 1% change in common equity ratio. This is derived from an analysis of the relationship between the cost of equity and the percentage of common equity in the capital structure. The analysis was done by comparing the DCF indicated cost of equity to the percentage of common equity in the capital structure for all electric utilities covered by Value Line.

AQUA UTILITIES FLORIDA, INC.
DISCOUNTED CASH FLOW (DCF) INDICATED COST OF EQUITY
TEN GAS COMPANIES USED IN FLORIDA LEVERAGE
GRAPH COMPUTATIONS

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
DCF cost of Equity
Schedule 3

			Based on Monthly Midpoint Market Price For Year Ending 8/31/08	Based on Market Price As of 8/31/2008
1	Dividend Yield On Market Price	[B]	3.70%	3.61%
2	Retention Ratio:			
	a) Market-to-book	[B]	2.39	2.25
	b) Div. Yld on Book	[C]	8.86%	8.14%
	c) Return on Equity	[A]	12.25%	12.25%
	d) Retention Rate	[D]	27.63%	33.58%
3	Reinvestment Growth	[E]	3.39%	4.11%
4	New Financing Growth	[F]	2.09%	1.88%
5	Total Estimate of Investor Anticipated Growth	[G]	5.48%	5.99%
6	Increment to Dividend Yield for Growth to Next Year	[H]	0.10%	0.11%
7	**Indicated Cost of Equity**	**[I]**	9.28%	9.71%

Some of the Considerations for Determining Future Expected Return on Equity:

Sources:			Median	Mean	Source:
[A]	Value Line Expectation		12.25%	13.00%	0
	Return on Equity to Achieve Zacks' Growth		13.08%	13.45%	0
	Earned Return on Equity in	2007	12.18%	12.40%	0
	Earned Return on Equity in	2006	11.99%	14.59%	0
	Earned Return on Equity in	2005	11.89%	13.44%	0

[B] JAR-1 SCHEDULE 4, Page 1
[C] Line 1 x Line 2a
[D] 1- Line 2b/Line 2c
[E] Line 2c x Line 2d
[F] S X V
[M/B X (Ext. Fin Rate+1]/(M/B + Ext. Fin. Rate-1) Ext. Fin. rate used = 1.50% [J]
[G] Line 3 + Line 4
[H] Line 1 x one-half of line 5
[I] Line 1 + Line 5 + Line 6
[J] JAR-1 SCHEDULE 5

AQUA UTILITIES FLORIDA, INC.
DISCOUNTED CASH FLOW (DCF) INDICATED COST OF EQUITY
TEN GAS COMPANIES USED IN FLORIDA LEVERAGE GRAPH COMPUTATIONS

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
DCF cost of Equity
Schedule 3

LESS EQUITIBLE RESOURCES

				Based on Monthly Midpoint Market Price For Year Ending 8/31/08	Based on Market Price As of 8/31/2008
1	Dividend Yield On Market Price		[B]	3.95%	3.82%
2	Retention Ratio:				
	a)	Market-to-book	[B]	1.85	1.89
	b)	Div. Yld on Book	[C]	7.30%	7.20%
	c)	Return on Equity	[A]	11.75%	11.75%
	d)	Retention Rate	[D]	37.89%	38.73%
3	Reinvestment Growth		[E]	4.45%	4.55%
4	New Financing Growth		[F]	1.27%	1.33%
5	Total Estimate of Investor Anticipated Growth		[G]	5.72%	5.88%
6	Increment to Dividend Yield for Growth to Next Year		[H]	0.11%	0.11%
7	**Indicated Cost of Equity**		[I]	9.79%	9.81%

Some of the Considerations for Determining Future Expected Return on Equity:

Sources:		Median	Mean	Source:
[A]	Value Line Expectation	11.50%	12.17%	JAR SCHEDULE 4, Page 2
	Return on Equity to Achieve Zacks' Growth	12.91%	6.82%	JAR SCHEDULE 4, Page 3
	Earned Return on Equity in 2007	11.96%	11.80%	JAR SCHEDULE 4, Page 2
	Earned Return on Equity in 2006	10.87%	12.37%	JAR SCHEDULE 4, Page 2
	Earned Return on Equity in 2005	11.64%	11.10%	JAR SCHEDULE 4, Page 2

[B] JAR-1 SCHEDULE 4, Page 1
[C] Line 1 x Line 2a
[D] 1- Line 2b/Line 2c
[E] Line 2c x Line 2d
[F] S X V

[M/B X (Ext. Fin Rate+1]/(M/B + Ext. Fin. Rate-1) Ext. Fin. rate used = 1.50% [J]

[G] Line 3 + Line 4
[H] Line 1 x one-half of line 5
[I] Line 1 + Line 5 + Line 6
[J] JAR SCHEDULE 5

AQUA UTILITIES FLORIDA, INC.
DISCOUNTED CASH FLOW (DCF) INDICATED COST OF EQUITY
TEN GAS COMPANIES USED IN FLORIDA LEVERAGE
GRAPH COMPUTATIONS

AQUA AMERICA INC. ONLY

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
DCF cost of Equity
Schedule 3
Page 3 of 3

		BASED ON MONTHLY MIDPOI MARKET PRICE FOR Year Ending 8/31/08	BASED ON MARKET PRICE AS OF 8/31/2008
1 Dividend Yield On Market Price	[B]	2.73%	2.53%
2 Retention Ratio:			
a) Market-to-book	[B]	2.50	2.77
b) Div. Yld on Book	[C]	6.83%	7.00%
c) Return on Equity	[A]	12.00%	12.00%
d) Retention Rate	[D]	43.08%	41.64%
3 Reinvestment Growth	[E]	5.17%	5.00%
4 New Financing Growth	[F]	1.24%	1.46%
5 Total Estimate of Investor Anticipated Growth	[G]	6.41%	6.46%
6 Increment to Dividend Yield for Growth to Next Year	[H]	0.09%	0.08%
7 Indicated Cost of Equity	**[I]**	9.23%	9.07%

Some of the Considerations for Determining Future Expected Return on Equity:

Sources:		Median	Mean	Source:
[A] Value Line Expectation		12.00%	12.00%	JAR-1 SCHEDULE 4, Page 2
Return on Equity to Achieve Zacks' Growth		12.65%	12.65%	JAR-1 SCHEDULE 4, Page 3
Earned Return on Equity in	2007	9.94%	9.94%	JAR-1 SCHEDULE 4, Page 2
Earned Return on Equity in	2006	10.56%	10.56%	JAR-1 SCHEDULE 4, Page 2
Earned Return on Equity in	2005	11.65%	11.65%	JAR-1 SCHEDULE 4, Page 2

[B] JAR-1 SCHEDULE 4, Page 1
[C] Line 1 x Line 2a
[D] 1- Line 2b/Line 2c
[E] Line 2c x Line 2d
[F] S X V

[M/B X (Ext. Fin Rate+1]/(M/B + Ext. Fin. Rate-1) Ext. Fin. rate used = 0.83% [J]

[G] Line 3 + Line 4
[H] Line 1 x one-half of line 5
[I] Line 1 + Line 5 + Line 6
[J] JAR-1 SCHEDULE 5

AQUA UTILITIES FLORIDA, INC.
COMPARATIVE COMPANIES
SELECTED FINANCIAL DATA

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
Comparative Companies
Schedule 4, page 1 of 3

	VL Issue	[1] Book Per Sh. Dec. 04	[2] Book Per Sh. Dec. 05	[3] Book Per Sh. Dec. 06	[4] Book Per Sh. Dec. 07	[5] Market Price At 08/31/08	[6] Market Price High for Year	[7] Market Price Low for Year	[8] Market to Book At 08/31/08	[9] Market to Book Avg. for Year	[10] Div. Rate	[11] Dividend Yield At 8/31/2008	[12] Dividend Yield Avg. for Year
		[A]	[A]	[A]	[A]	[B]	[B]	[B]	[C]	[C]	[A]	[D]	[D]
TEN GAS COMPANIES USED IN FLORIDA LEVERAGE GRAPH COMPUTATIONS													
AGL	ATG	**$18.06**	**$19.29**	**$20.71**	**$21.74**	**$33.06**	**$41.16**	**$32.20**	1.52	1.73	**$1.68**	5.08%	4.58%
ATMOS Energy Corp.	ATO	**$18.05**	**$19.90**	**$20.16**	**$22.01**	**$27.54**	**$29.63**	**$25.00**	1.25	1.30	**$1.30**	4.72%	4.76%
Equitable Res.	EQT	**$7.17**	**$2.96**	**$7.78**	**$8.98**	**$49.91**	**$76.14**	**$46.79**	5.56	7.33	**$0.88**	1.76%	1.43%
Laclede Group	LG	**$16.96**	**$17.31**	**$18.85**	**$19.79**	**$44.93**	**$47.98**	**$30.60**	2.27	2.03	**$1.50**	3.34%	3.82%
Nicor, Inc.	GAS	**$16.99**	**$18.36**	**$19.43**	**$20.58**	**$45.89**	**$46.84**	**$32.35**	2.23	1.98	**$1.86**	4.05%	4.70%
N. W. National Gas	NWN	**$20.64**	**$21.28**	**$22.01**	**$22.52**	**$48.73**	**$50.89**	**$41.07**	2.16	2.07	**$1.50**	3.08%	3.26%
Piedmont National Gas	PNY	**$11.15**	**$11.53**	**$11.83**	**$11.99**	**$28.85**	**$29.20**	**$24.01**	2.41	2.23	**$1.04**	3.60%	3.91%
South Jersey Inds.	SJI	**$12.41**	**$13.50**	**$15.11**	**$16.25**	**$35.67**	**$39.36**	**$31.83**	2.20	2.27	**$1.08**	3.02%	3.03%
Southwest Gas	SWX	**$19.18**	**$19.10**	**$21.58**	**$22.98**	**$30.35**	**$31.74**	**$25.14**	1.32	1.28	**$0.90**	2.97%	3.16%
WGL Holdings	WGL	**$16.95**	**$17.80**	**$18.28**	**$19.83**	**$32.20**	**$35.69**	**$30.26**	1.62	1.73	**$1.44**	4.47%	4.37%
	AVERAGE	$15.76	$16.10	$17.57	$18.67	$37.71	$42.86	$31.93	2.25	2.39	$1.32	3.61%	3.70%
	MEDIAN								2.18	2.01		3.47%	3.86%
RESULT WITHOUT EQUITIBLE RESOURCES													
	AVERAGE	$16.71	$17.56	$18.66	$19.74	$36.36	$39.17	$30.27	1.89	1.85	$1.37	3.82%	3.95%
	MEDIAN								2.16	1.98		3.60%	3.91%
AQUA AMERICA INC.													
		$5.89	**$6.30**	**$6.96**	**$7.32**	**$18.29**	**$25.10**	**$14.46**	2.50	2.77	**$0.50**	2.73%	2.53%

e= Estimated by Value Line

Sources:

[A] Most current Value Line at time of prep. of schedule. Most current quarterly dividend rate X 4
[B] Yahoo Finance -- Historical Prices
[C] Market price divided by book value
[D] Dividend rate divided by market price

AQUA UTILITIES FLORIDA, INC.
COMPARATIVE COMPANIES
SELECTED FINANCIAL DATA
EARNINGS PER SHARE AND RETURN ON EQUITY

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
Comparative Companies
Schedule 4, page 2 of 3

	[1] EPS 2005	[2] EPS 2006	[3] EPS 2007	[4] Return on Eq. 2006	[5] Return on Eq. 2007	[6] Value Line Future Exp. Return on Eq.	[7] Return on Equity 2005
	[A]	[A]	[A]	[B]	[B]	[A]	[B]
TEN GAS COMPANIES USED IN FLORIDA LEVERAGE GRAPH COMPUTATIONS							
AGL	**$2.48**	**$2.72**	**$2.72**	13.60%	12.82%	**14.00%**	13.28%
ATMOS Energy Corp.	**$1.72**	**$2.00**	**$1.94**	9.99%	9.20%	**9.50%**	9.06%
Equitable Res.	**$1.75**	**$1.86**	**$1.49**	34.64%	17.78%	**20.50%**	34.55%
Laclede Group	**$1.90**	**$2.37**	**$2.31**	13.11%	11.96%	**11.50%**	11.09%
Nicor, Inc.	**$2.27**	**$2.87**	**$2.99**	15.19%	14.95%	**14.00%**	12.84%
N. W. National Gas	**$2.11**	**$2.35**	**$2.76**	10.86%	12.40%	**11.00%**	10.07%
Piedmont National Gas	**$1.32**	**$1.27**	**$1.40**	10.87%	11.75%	**13.00%**	11.64%
South Jersey Inds.	**$1.71**	**$2.46**	**$2.09**	17.20%	13.33%	**16.50%**	13.20%
Southwest Gas	**$1.25**	**$1.98**	**$1.95**	9.73%	8.75%	**9.50%**	6.53%
WGL Holdings	**$2.11**	**$1.94**	**$2.10**	10.75%	11.02%	**10.50%**	12.14%
	$1.86	$2.18	$2.18	14.59%	12.40%	13.00%	13.44%
				11.99%	12.18%	12.25%	11.89%
RESULT WITHOUT EQUITIBLE RESOURCES							
Equitable Res.	$1.87	$2.22	$2.25	12.37%	11.80%	12.17%	11.10%
				10.87%	11.96%	11.50%	11.64%
AQUA AMERICA INC.							
Aqua America Inc.	**$0.71**	**$0.70**	**$0.71**	10.56%	9.94%	**12.00%**	11.65%

e= Estimated by Value Line

Source:

[A] Most current Value Line at time of prep. of schedule.

[B] Earnings Per Share divided by average book value. Book value shown on JAR-1, SCHEDULE 4, Page 1

AQUA UTILITIES FLORIDA, INC.
COMPARATIVE COMPANIES
RETURN ON EQUITY IMPLIED IN
ZACKS PROJECTED GROWTH RATES

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
Comparative Companies
Schedule 4, page 3 of 3

		Dec. 07 Y/E Book [A]	Earnings 2007 [A]	Dividends [A]	Analyst 5 Year Growth Rate 10/ [B]	Y/E Book in 2011 at Zack's Growth [C]	Y/E Book in 2012 at Zack's Growth [C]	Earnings 2012 at Zack's Growth [C]	Return on Equity to achieve Analysts' Growth [C]	VALUE LINE BETA [A]
TEN GAS COMPANIES USED IN FLORIDA LEVERAGE GRAPH COMPUTATIONS										
AGL	ATG	$21.74	$2.72	$1.68	**4.80%**	$26.42	$27.74	$3.44	12.70%	**0.85**
ATMOS Energy Corp.	ATO	$22.01	$1.94	$1.30	**5.40%**	$24.93	$25.77	$2.52	9.95%	**0.80**
Equitable Res.	EQT	$8.98	$1.49	$0.88	**9.80%**	$12.08	$13.05	$2.38	18.92%	**0.90**
Laclede Group	LG	$19.79	$2.31	$1.50	**10.00%**	$23.93	$25.23	$3.72	15.14%	**0.80**
Nicor, Inc.	GAS	$20.58	$2.99	$1.86	**5.80%**	$25.79	$27.29	$3.96	14.93%	**0.90**
N. W. National Gas	NWN	$22.52	$2.76	$1.50	**6.50%**	$28.43	$30.16	$3.78	12.91%	**0.75**
Piedmont National Gas	PNY	$11.99	$1.40	$1.04	**5.60%**	$13.64	$14.12	$1.84	13.25%	**0.80**
South Jersey Inds.	SJI	$16.25	$2.09	$1.08	**7.80%**	$21.15	$22.62	$3.04	13.90%	**0.80**
Southwest Gas	SWX	$22.98	$1.95	$0.90	**8.00%**	$28.09	$29.63	$2.87	9.93%	**0.80**
WGL Holdings	WGL	$19.83	$2.10	$1.44	**7.50%**	$23.00	$23.95	$3.01	12.84%	**0.85**
		$18.67	$2.18	$1.32	7.12%	$22.75	$23.96	$3.06	13.45%	0.83
					7.00%				13.08%	0.80
		$19.74	$2.25	$1.37	6.82%	$23.93	$25.17	$3.13	12.84%	0.82
					6.50%				12.91%	
Aqua America Inc.	ATG	$7.32	$0.71	$0.50	**8.70%**	$8.36	$8.68	$1.08	12.65%	**0.95**

[A] Must Current Value Line at time of prep of schedule
[B] Zacks.com, 5/29/08
[C] Projected return on equity is obtained by escalating both dividends and earnings per share by the stated growth rate, and adding earnings and subtracting dividends in each year to determine the book value.

AQUA UTILITIES FLORIDA, INC.
EXTERNAL FINANCING RATE
(Millions of Shares)

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
External Financing Rate
Schedule 5
Page 1 of 1

TEN GAS COMPANIES USED IN FLORIDA LEVERAGE GRAPH COMPUTATION	**Common Stock Outstanding** 2007	2011-13	**Compound Annual**
AGL	76.40	80.00	0.93%
ATMOS Energy Corp.	89.33	115.00	5.18%
Equitable Res.	122.16	124.00	0.30%
Laclede Group	21.65	25.50	3.33%
Nicor, Inc.	45.90	45.00	-0.40%
N. W. National Gas	26.41	28.00	1.18%
Piedmont National Gas	73.23	72.00	-0.34%
South Jersey Inds.	29.61	33.00	2.19%
Southwest Gas	42.81	48.00	2.31%
WGL Holdings	49.45	50.00	0.22%
		Average	1.49%
		Median	1.05%
		Round to	**1.50%**
Less Equitible		Average	1.62%
		Median	1.18%
		Round to	1.50%

AQUA AMERICA INC. ONLY	**Common Stock Outstanding** 2007	2011-13	**Compound Annual**
Aqua America Inc.	133.40	139.00	0.83%

External financing rate adjusted for change in common equity ratio

Source: Most current Value Line at time of prep. of schedule.

AQUA UTILITIES FLORIDA, INC.
CAPITAL ASSET PRICING MODEL
BASED ON HISTORICAL ACTUAL
COMPOUND ANNUAL RETURNS

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
CAPM Pricing Model
Schedule 6

1	Historical Actual Return - beta = 1	10.40%	[A]
2	Historical Actual Return - beta = 0.83	9.42%	[B]
3	Interest Rate on 30-Year Treasury Bonds	4.43%	[C]
4	Interest Rate on Long-Term Inflation Indexed Treasury Bonds	2.17%	[D]
5	Current Market Inflation Expectation	2.26%	Line 3 minus Line 4
6	Historical Actual Inflation	3.00%	[E]
7	Difference From Historical Actual Inflation	0.74%	
8	Adjusted Returns For Current Market Inflation Expectation Beta = 1	9.66%	

CAPITAL ASSET PRICING MODEL

7	Indicated Cost of Equity for Portfolio of Companies with a beta of 0.83	8.68%

Sources:
[A] Ibbotson Associates 2008 Yearbook, page 295
[B] JAR-1, Schedule 6, Page 2
[C] US Treasury, as of 8/31/08
[D] Federal Reserve Statistical Release
[E] Ibbotson Associates 2008 Yearbook, page 331

AQUA UTILITIES FLORIDA, INC.
CAPITAL ASSET PRICING MODEL
HISTORIC ACTUAL COMPOUND RETURNS
and HISTORIC ACTUAL COMPOUND ANNUAL RETURNS ADJUSTED FOR
DIFFERENCE BETWEEN CURRENT AND HISTORICAL ACTUAL INFLATION RATE

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
CAPM Pricing Model
Schedule 6
Page 2 of 4

		GAS COMPANIES									
	Portfolio by Size Decile	1	2	3	4	5	6	7	8	9	10
[A]	Beta	0.91%	1.03%	1.10%	1.12%	1.16%	1.18%	1.24%	1.30%	1.35%	1.41%
[B]	Historic Actual Compounded Annual Return	9.60%	10.90%	11.30%	11.10%	11.70%	11.70%	11.60%	11.80%	11.90%	13.60%
[C]	Reduced Compounded Annual Returns	8.86%	10.16%	10.56%	10.36%	10.96%	10.96%	10.86%	11.06%	11.16%	12.86%

[D] **Least Squared Line derived from compounded annual returns per decile**

Beta	Slope	Y-Intercept	Return
0.83	5.9922	4.45	**9.42%**

See graph on JAR Schedule 6, page 5

Least Squared Line

	Beta	Slope	Y-Intercept	Return
[E]	0.83	5.9922	3.71	**8.68%**

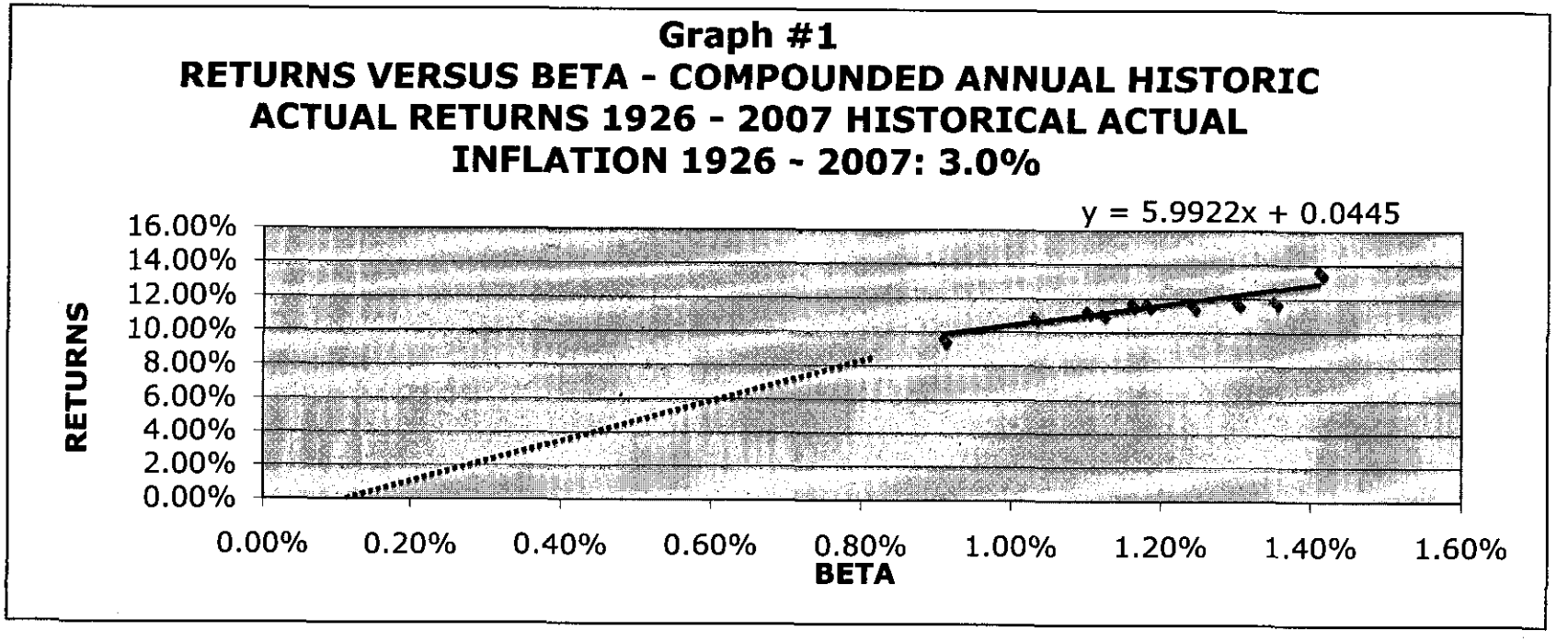
See graph on JAR Schedule 6, page 4

[A] Ibbotson Associates 2008 Yearbook, page 142
[B] Ibbotson Associates 2008 Yearbook, page 130
[C] by 0.35% actual difference between 3.00% historical and 2.65% current expected long-term inflation rate.
[D] Least Squared Line derived from Historical Actual Compounded Annual Return
[E] Least Squared Line derived from Reduced Compouned Annual Return

AQUA UTILITIES FLORIDA, INC.
CAPITAL ASSET PRICING MODEL
RETURNS VERSUS BETA
COMPOUND ANNUAL RETURNS

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
CAPM Pricing Model
Schedule 6
Page 3 of 4

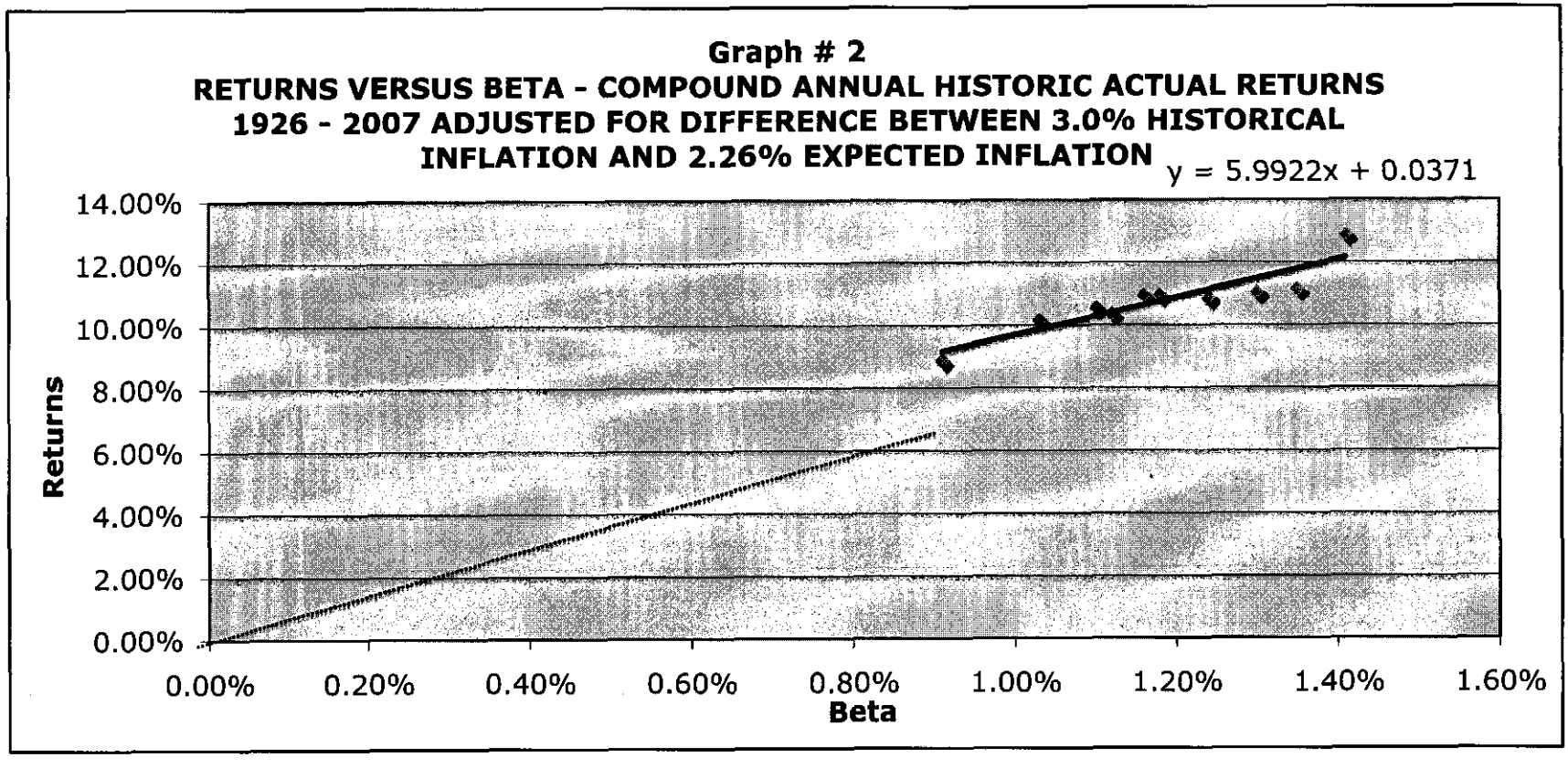
Beta	0.91%	1.03%	1.10%	1.12%	1.16%	1.18%	1.24%	1.30%	1.35%	1.41%
Historic Actual Compounded Annual Return	9.60%	10.90%	11.30%	11.10%	11.70%	11.70%	11.60%	11.80%	11.90%	13.60%



AQUA UTILITIES FLORIDA, INC.
CAPITAL ASSET PRICING MODEL
RETURNS VERSUS BETA
COMPOUND ANNUAL RETURNS

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
CAPM Pricing Model
Schedule 6
Page 4 of 4

Beta	0.91%	1.03%	1.10%	1.12%	1.16%	1.18%	1.24%	1.30%	1.35%	1.41%
Reduced Compounded Annual Returns	8.86%	10.16%	10.56%	10.36%	10.96%	10.96%	10.86%	11.06%	11.16%	12.86%



AQUA UTILITIES FLORIDA, INC.
ANALYSIS OF ACTUAL CAPITAL STRUCTURES OF OTHER UTILITIES

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
Actual Capital Structures
Schedule 7
Page 1 of 1

	% Common Equity w/out Short Term Debt						Quantity					Percentage			
	2003	2004	2005	2006	2007	($000,000s) Total Debt	LT Debt	ST Debt	Pfd Stock	Equity	Total Capital	LT Debt	ST Debt	Pfd Stock	Equity Ratio With ST Debt
AGL	49.7%	46.0%	48.1%	49.8%	49.8%	$2,150.0	$1,637.0	$513.0	$0.0	$1,624.0	$3,774.0	43.4%	13.6%	0.0%	**43.0%**
ATMOS Energy Corp.	49.8%	56.8%	42.3%	43.0%	48.0%	$2,234.0	$2,119.7	$114.3	$0.0	$1,956.6	$4,190.6	50.6%	2.7%	0.0%	**46.7%**
Equitable Res.*						$1,253.5	$1,253.5	$0.0	$0.0	$1,100.0	$2,353.5	53.3%	0.0%	0.0%	**46.7%**
Laclede Group	49.4%	48.3%	51.8%	50.4%	54.6%	$368.0	$309.2	$58.8	$0.5	$372.5	$741.0	41.7%	7.9%	0.1%	**50.3%**
Nicor, Inc.	60.3%	60.1%	62.5%	63.7%	69.0%	$516.5	$373.5	$143.0	$0.6	$832.7	$1,349.8	27.7%	10.6%	0.0%	**61.7%**
N. W. National Gas	50.3%	54.0%	53.0%	53.7%	53.7%	$584.7	$512.0	$72.7	$0.0	$593.8	$1,178.5	43.4%	6.2%	0.0%	**50.4%**
Piedmont National Gas	57.8%	56.4%	58.6%	51.7%	51.6%	$903.2	$824.7	$78.5	$0.0	$879.2	$1,782.4	46.3%	4.4%	0.0%	**49.3%**
South Jersey Inds.	49.0%	51.0%	55.1%	55.3%	57.3%	$447.2	$332.8	$114.4	$0.0	$446.6	$893.8	37.2%	12.8%	0.0%	**50.0%**
Southwest Gas	34.0%	35.8%	36.2%	39.4%	41.9%	$1,306.8	$1,268.7	$38.1	$0.0	$914.9	$2,221.7	57.1%	1.7%	0.0%	**41.2%**
WGL Holdings	54.3%	57.2%	58.6%	61.5%	60.3%	$695.8	$600.5	$95.3	$28.2	$954.9	$1,678.9	35.8%	5.7%	1.7%	**56.9%**
Average	**50.5%**	**51.7%**	**51.8%**	**52.1%**	**54.0%**	**$10,460**	**$9,232**	**$1,228**	**$29**	**$9,675**	**$20,164**	**43.64%**	**6.56%**	**0.18%**	**49.62%**
											Median	**43.41%**	**5.92%**	**0.00%**	**49.65%**

Source: Most current Value Line at time of prep.

*Value Line does not provide a common equity ratio for Equitable Res
The amount of equity is directly from Value Line "Shr. Equity ($mill)"

AQUA UTILITIES FLORIDA, INC.
AQUA AMERICA CAPITAL STRUCTURE

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
Aqua America Capital Structure
Schedule 8
Page 1 of 1

AQUA

In thousands of dollars	30-Jun-08		31-Dec-07		31-Dec-06	
Long Term Borrowings*	$1,219,425	52.53%	$1,238,980	54.53%	$982,815	48.57%
Short-term borrowings	$79,725	3.43%	$56,918	2.50%	$119,150	5.89%
Equity	$1,022,114	44.03%	$976,298	42.97%	$921,630	45.54%
Total Capital	$2,321,264		$2,272,196		$2,023,595	

*Includes $7,002 of current portion of long-term debt

Source: Aqua America, Inc. 10Q for 2008 and 2007
Aqua America, Inc. 10K for 2006

AQUA UTILITIES FLORIDA, INC.
DIVIDEND GROWTH RATE COMPARISON

Docket No. 080121-WS
Exhibit No. ___(JAR-1)
Dividend Growth Rates
Schedule 9
Page 1 of 1

TABLE 1

DIFFERENT GROWTH RATES	**Value**	**Growth**
Earnings Per Share	$ 1.00	6%
Dividends Per Share	$ 0.60	3%
Book Value Per Share	$ 10.00	4%
Stock Price	$ 11.00	6%

Growth at 6% per share	**2007**	**2008**	**2009**	**2010**	**2011**
Earnings Per Share	$ 1.06	$ 1.12	$ 1.19	$ 1.26	$ 1.34
Dividends Per Share	$ 0.62	$ 0.64	$ 0.66	$ 0.68	$ 0.70
Book Value Per Share	$ 10.40	$ 10.82	$ 11.25	$ 11.70	$ 12.17
Stock Price	$ 11.66	$ 12.36	$ 13.10	$ 13.89	$ 14.72
Dividend Yield	**5.30%**	**5.15%**	**5.00%**	**4.86%**	**4.73%**
Market to Book Ratio	1.12	1.14	1.16	1.19	1.21
Return on Book Equity	**10.19%**	**10.39%**	**10.59%**	**10.79%**	**11.00%**
P/E Ratio	11.00	11.00	11.00	11.00	11.00

Table 2

Growth at ROE X Retention Rate	**Value**	**Growth**
Earnings Per Share	$ 1.00	4%
Book Value Per Share	$ 10.00	4%
Stock Price	$ 11.00	4%
Dividends Per Share	$ 0.60	4%

Growth at 6% per share	**2007**	**2008**	**2009**	**2010**	**2011**
Earnings Per Share	$ 1.04	$ 1.08	$ 1.12	$ 1.17	$ 1.22
Book Value Per Share	**$ 10.40**	**$ 10.82**	**$ 11.25**	**$ 11.70**	**$ 12.17**
Stock Price	$ 11.44	$ 11.90	$ 12.37	$ 12.87	$ 13.38
Dividends Per Share	$ 0.62	$ 0.65	$ 0.67	$ 0.70	$ 0.73
Dividend Yield	5.45%	5.45%	5.45%	5.45%	5.45%
Market to Book Ratio	1.10	1.10	1.10	1.10	1.10
Return on Book Equity	10.00%	10.00%	10.00%	10.00%	10.00%
P/E Ratio	11.00	11.00	11.00	11.00	11.00
Book Value Per Share Calculated	**$ 10.40**	**$ 10.82**	**$ 11.25**	**$ 11.70**	**$ 12.17**
Growth Rate					

RESUME OF JAMES A. ROTHSCHILD

UTILITY REGULATION EXPERIENCE

- Filed expert testimony on rate of return, accounting and/or financial issues with regard to electric, telephone, gas, water, health care and insurance rate setting matters in the following jurisdictions:

Alabama	Kentucky	Oklahoma
Arizona	Maryland	Oregon
Connecticut	Maine	Pennsylvania
Delaware	Massachusetts	Rhode Island
FERC	Minnesota	South Carolina
Florida	New Jersey	Vermont
Georgia	New York	Washington, DC
Illinois	Nova Scotia	Washington

OTHER BUSINESS EXPERIENCE

- Economic Analyst - Evaluated profitability of expansion and new venture proposals and provided financial support material for contract negotiations.

- Process Engineer - Responsible for process design and invented process improvements, which included a device that reduced a major water pollution problem.

EMPLOYMENT HISTORY

February 1985-Present	Rothschild Financial Consulting
May 1979-January 1985	Georgetown Consulting Group, Inc.
August 1976-May 1979	J. Rothschild Associates
May 1972-August 1976	Touche Ross & Company
June 1967-May 1972	Olin Corporation

EDUCATION

- Case Western Reserve University, MBA, Banking& Finance, 1971
- University of Pittsburgh, BS, Chemical Engineering, 1967