

BEFORE THE PUBLIC SERVICE COMMISSION

In re: Water and wastewater industry annual reestablishment of authorized range of return on common equity for water and wastewater utilities pursuant to Section 367.081(4)(f), F.S.

DOCKET NO. 040006-WS
ORDER NO. PSC-04-0587-PAA-WS
ISSUED: June 10, 2004

The following Commissioners participated in the disposition of this matter:

BRAULIO L. BAEZ, Chairman
J. TERRY DEASON
LILA A. JABER
RUDOLPH "RUDY" BRADLEY
CHARLES M. DAVIDSON

NOTICE OF PROPOSED AGENCY ACTION
ORDER ESTABLISHING AUTHORIZED RANGE OF RETURNS ON
COMMON EQUITY FOR WATER AND WASTEWATER UTILITIES

BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are substantially affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

Section 367.081(4)(f), Florida Statutes, authorizes the Commission to establish, not less than once each year, a leverage formula to calculate a reasonable range of returns on equity for water and wastewater utilities. In Docket No. 030006-WS, we established the current leverage formula by Order No. PSC-03-0707-PAA-WS, issued on June 13, 2003. This Order utilizes the current leverage formula methodology, set forth in Order No. PSC-01-2514-FOF-WS, issued on December 24, 2001, in Docket No. 010006-WS, which uses returns on equity from financial models based upon an index of natural gas utilities.

DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

The current leverage formula methodology was applied using updated financial data. Accordingly, we hereby approve the following leverage formula:

$$\text{Return on Common Equity} = 7.57\% + 1.533/\text{Equity Ratio}$$

Where the Equity Ratio = Common Equity / (Common Equity + Preferred Equity + Long-Term and Short-Term Debt)

Range: 9.10% @ 100% equity to 11.40% @ 40% equity

We note that the leverage formula depends on four basic assumptions:

- 1) Business risk is similar for all WAW utilities;
- 2) The cost of equity is an exponential function of the equity ratio;
- 3) The marginal weighted average cost of investor capital is constant over the equity ratio range of 40% to 100%; and,
- 4) The cost rate at an assumed Moody's Baa3 bond rating, plus a 50 basis point private placement premium and a 50 basis point small utility risk premium, represents the average marginal cost of debt to a Florida WAW utility over an equity ratio range of 40% to 100%.

For these reasons, the leverage formula is assumed to be appropriate for the average Florida WAW utility.

The leverage formula relies on two return on equity (ROE) models and several adjustments for differences in risk and debt cost in order to conform the results of the models to the average Florida WAW utility. Both models include a four percent adjustment for flotation costs. The models are as follows:

- A Discounted Cash Flow (DCF) model applied to an index of natural gas utilities (NG) that have publicly traded stock and are followed by the Value Line Investment Survey (Value Line). The DCF model is an annual model and uses prospective growth rates. The index consists of 12 companies that derive at least 60% of their total revenue from gas distribution service. These companies have a median Standard and Poor's bond rating of A.
- A Capital Asset Pricing Model (CAPM) using a market return for companies followed by Value Line, the average yield on the Treasury's long-term bonds projected by the Blue Chip Financial Forecasts, and the average beta of the index of NG utilities. The market return for the 2004 leverage formula was calculated using an annual model. We added 20 basis points to the annual model result to estimate a quarterly result.

The indicated returns of the above models are averaged and the resulting estimate is adjusted in the following manner:

- A bond yield differential of 43 basis points is added to reflect the difference in yields between an A/A2 rated bond, which is the average bond rating for the NG utility index, and a BBB-/Baa3 rated bond. Florida WAW utilities are assumed to be comparable to companies with the lowest investment grade bond rating, which is Baa3. This adjustment compensates for the difference between the credit quality of "A" rated debt and the credit quality of the minimum investment grade rating.
- A private placement premium of 50 basis points is added to reflect the difference in yields on publicly traded debt and privately placed debt, which is illiquid. Investors require a premium for the lack of liquidity of privately placed debt.
- A small utility risk premium of 50 basis points is added to reflect that the average Florida WAW utility is too small to qualify for privately placed debt.

After the above adjustments, the resulting cost of equity estimate is included in the average capital structure for the NG utilities. The cost of equity is determined at a 40% equity ratio and the leverage formula is derived. The leverage formula derived using the current methodology with updated financial data is presented in Attachment 1 to this Order.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the leverage formula methodology, summarized herein and in Attachment 1, used to calculate a range of returns on common equity for water and wastewater utilities, is hereby approved. It is further

ORDERED that Attachment 1 is incorporated herein by reference. It is further


ORDERED that returns on common equity are hereby capped at 11.40 percent for all water and wastewater utilities with equity ratios of less than 40 percent in order to discourage imprudent financial risk. It is further

ORDERED that the provisions of this Order, issued as proposed agency action, shall become final and effective upon the issuance of a Consummating Order unless an appropriate petition, in the form provided by Rule 28-106.201, Florida Administrative Code, is received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on the date set forth in the "Notice of Further Proceedings" attached hereto. It is further

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ORDERED that in the event this Order becomes final, this docket shall remain open to allow our staff to monitor changes in capital market conditions and to readdress the reasonableness of the leverage formula as conditions warrant.

By ORDER of the Florida Public Service Commission this 10th day of June, 2004.



BLANCA S. BAYO, Director
Division of the Commission Clerk
and Administrative Services

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NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing that is available under Section 120.57, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The action proposed herein is preliminary in nature. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This petition must be received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on July 1, 2004.

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In the absence of such a petition, this order shall become final and effective upon the issuance of a Consummating Order.

Any objection or protest filed in this/these docket(s) before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.



SUMMARY OF RESULTS

Leverage Formula Update

	<u>Updated Results</u>	<u>Currently in Effect</u>
(A) CAPM ROE for Natural Gas Index	10.02%	9.53%
(B) DCF ROE for Natural Gas Index	<u>9.36%</u>	<u>10.74%</u>
AVERAGE	9.69%	10.13%
Bond Yield Differential	.43%	.44%
Private Placement Premium	.50%	.50%
Small-Utility Risk Premium	.50%	.50%
Adjustment to Reflect Required Equity		
Return at a 40% Equity Ratio	<u>.28%</u>	<u>.38%</u>
Cost of Equity for Average Florida WAW		
Utility at a 40% Equity Ratio	<u>11.40%</u>	<u>11.96%</u>

2003 Leverage Formula (Currently in Effect)

Return on Common Equity =	8.16% + 1.518/ER
Range of Returns on Equity =	9.68% - 11.96%

2004 Leverage Formula (Approved)

Return on Common Equity =	7.57% + 1.533/ER
Range of Returns on Equity =	9.10% - 11.40%

Marginal Cost of Investor Capital
 Average Water and Wastewater Utility

<u>Capital Component</u>	<u>Ratio</u>	<u>Marginal Cost Rate</u>	<u>Weighted Marginal Cost Rate</u>
Common Equity	43.16%	11.12%	4.80%
Total Debt	<u>56.84%</u>	7.57% *	<u>4.30%</u>
	100.00%		9.10%

A 40% equity ratio is the floor for calculating the required return on common equity. The return on equity at a 40% equity ratio is $7.57\% + 1.533/.40 = 11.4\%$

Marginal Cost of Investor Capital
 Average Water & Wastewater Utility at 40% Equity Ratio

<u>Capital Component</u>	<u>Ratio</u>	<u>Marginal Cost Rate</u>	<u>Weighted Marginal Cost Rate</u>
Common Equity	40.00%	11.40%	4.56%
Total Debt	<u>60.00%</u>	7.57% *	<u>4.54%</u>
	100.00%		9.10%

Where: ER = Equity Ratio = Common Equity / (Common Equity + Preferred Equity + Long-Term Debt + Short-Term Debt)

* Assumed Baa3 rate for April 2004 plus a 50 basis point private placement premium and a 50 basis point small utility risk premium.

Source: Moody's Credit Perspectives

ANNUAL DISCOUNTED CASH FLOW MODEL

INDEX COMPANY	NATURAL GAS INDEX VALUE LINE ISSUE: Ed. 3 - MARCH 19, 2004									APRIL		
	DIV 0	DIV 1	DIV 2	DIV 3	DIV 4	EPS4	ROE4	GR1-4	GR4+	HIGH PRICE	LOW PRICE	AVG. PRICE
AGL RESOURCES	1.12	1.12	1.12	1.12	1.12	2.35	12.00	1.0000	1.0628	29.41	27.53	28.470
CASCADE NATURAL GAS	.96	0.96	0.97	0.97	0.98	1.95	15.00	1.0069	1.0746	22.52	20.53	21.525
ENERGEN CORP.	.75	0.77	0.79	0.81	0.83	3.85	18.00	1.0253	1.1412	42.61	40.41	41.510
KEYSPAN CORP.	1.78	1.78	1.82	1.86	1.90	3.40	12.00	1.0220	1.0529	38.99	35.41	37.200
LACLEDE GROUP	1.36	1.36	1.37	1.37	1.38	2.10	11.00	1.0049	1.0377	31.35	27.54	29.445
NICOR, INC.	1.86	1.86	1.91	1.95	2.00	2.70	14.50	1.0245	1.0376	35.65	33.26	34.455
NORTHWEST NATURAL GAS	1.30	1.33	1.37	1.41	1.45	2.40	10.50	1.0292	1.0416	31.65	29.15	30.400
PEOPLES ENERGY	2.16	2.20	2.21	2.23	2.24	3.20	10.50	1.0060	1.0315	45.19	41.15	43.170
PIEDMONT NATURAL GAS	1.72	1.78	1.82	1.86	1.90	3.05	11.50	1.0220	1.0434	43.03	39.80	41.415
SOUTH JERSEY INDUSTRIES	1.62	1.67	1.70	1.74	1.77	3.40	10.50	1.0196	1.0503	42.10	40.24	41.170
SOUTHWEST GAS	.82	0.82	0.85	0.87	0.90	2.15	9.50	1.0315	1.0552	24.06	22.75	23.405
WGL HOLDINGS	1.30	1.30	1.31	1.33	1.34	2.15	9.50	1.0102	1.0358	30.39	27.75	29.070
AVERAGE	1.3958	1.4125	1.4359	1.4598	1.4842	2.73	12.0417	1.0168	1.0554			33.436
					1.5664							

S&P STOCK GUIDE: MAY 2004 with April Stock Prices

Stock Price w/four Percent Flotation Costs	32.0988	Annual	9.36%	ROE		
Cash Flows	1.28014	1.185877	1.102313	1.024729	.961839	26.5439
Present Value of Cash Flows	32.0988					

\$32.10 = April 2004 average stock price with a 4% flotation cost.
 9.36% = Cost of equity required to match the current stock price with the expected cash flows.

Sources:

1. Stock Prices - S&P Stock Guide, May 2004 Edition.
2. DPS, EPS, ROE - Value Line Edition 3, March 19, 2004.

Capital Asset Pricing Model Cost of Equity for
Water and Wastewater Industry

CAPM analysis formula

$$K = RF + \text{Beta}(\text{MR} - \text{RF})$$

$$K = \text{Investor's required rate of return}$$

$$\text{RF} = \text{Risk-free rate (Blue Chip forecast for Long-term Treasury bond)}$$

$$\text{Beta} = \text{Measure of industry-specific risk (Average for water utilities followed by Value Line)}$$

$$\text{MR} = \text{Market return (Value Line Investment Survey For Windows, May 2004)}$$

$$\underline{10.02\%} = 5.48\% + .73(11.46\% - 5.48\%) + .20\%$$

Note: We calculated the market return using an annual DCF model for a large number of dividend paying stocks followed by Value Line. For April 2004 stock prices, the result was 11.26%. We have added 20 basis points to allow for the quarterly compounding of dividends. The resulting market return is 11.46%. We have also added 20 basis points to the CAPM result to allow for a four-percent flotation cost.

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BOND YIELD DIFFERENTIALS
Public Utility Long Term Bond Yield Averages

Long-Term Corporate Bond Yield Averages
for Avg. Public Utility

120 Month Average Spread	0.1074	0.1074	0.1074	0.1074
MONTH/YEAR	A2 SPREAD	A3 SPREAD	Baa1 SPREAD	Baa2 SPREAD Baa3
Apr-2004	6.35 0.04	6.39 0.04	6.42 0.04	6.46 0.04 6.50

Source: Moody's Credit Perspectives

INDEX STATISTICS AND FACTS

<u>Natural Gas Distribution Proxy Group</u>	<u>S & P Bond Rating</u>	<u>% of Gas Revenue</u>	<u>V/L Market Capital (millions)</u>	<u>Equity Ratio</u>	<u>Value Line Beta</u>
AGL Resources	A-	95%	1,838.3	41%	0.75
Cascade Natural Gas	BBB+	100%	249.2	41%	0.70
Energen Corp.	A-	62%	1,526.9	55%	0.70
KeySpan Corp.	A+	60%	6,119.0	37%	0.75
Laclede Group	A	74%	594.2	35%	0.70
NICOR Inc.	AA	88%	1,610.3	41%	1.00
Northwest Nat. Gas	A	98%	840.4	46%	0.65
Peoples Energy	A-	70%	1,661.7	44%	0.75
Piedmont Natural Gas	A	77%	1,426.8	53%	0.70
South Jersey Industries	A	70%	532.7	41%	0.55
Southwest Gas	BBB-	84%	792.6	33%	0.75
WGL Holdings Inc.	AA-	63%	1,419.3	<u>49%</u>	<u>0.70</u>
Average:				43.16%	0.73

Source:

Value Line Investment Survey for Windows, April 2004

S.E.C. Forms 10Q and 10K for Companies

C.A. Turner Utilities Report, May 2004