BEFORE THE FLORIDA 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. 130006-WS ORDER NO. PSC-13-0241-PAA-WS ISSUED: June 3, 2013

The following Commissioners participated in the disposition of this matter:

RONALD A. BRISÉ, Chairman LISA POLAK EDGAR ART GRAHAM EDUARDO E. BALBIS JULIE I. BROWN

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 (F.A.C.).

BACKGROUND

Section 367.081(4)(f), Florida Statutes (F.S.), authorizes this Commission to establish, not less than once each year, a leverage formula to calculate a reasonable range of returns on equity (ROE) for water and wastewater (WAW) utilities. The leverage formula methodology currently in use was established in Order No. PSC-01-2514-FOF-WS.¹ On October 23, 2008, we held a formal hearing in Docket No. 080006-WS to allow interested parties to provide testimony regarding the validity of the leverage formula.² Based on the record in that proceeding, we approved the 2008 leverage formula in Order No. PSC-08-0846-FOF-WS.³ In that Order, we

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¹ See Order No. PSC-01-2514-FOF-WS, issued December 24, 2001, in Docket No. 010006-WS, <u>In re: Water and</u> 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.

 $^{^{2}}$ At the May 20, 2008, Commission Agenda Conference, upon request of the Office of Public Counsel, this Commission voted to set the establishment of the appropriate leverage formula directly for hearing.

³ <u>See</u> Order No. PSC-08-0846-FOF-WS, issued December 31, 2008, in Docket No. 080006-WS, <u>In re: Water and</u> 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.

reaffirmed the methodology that was previously approved in Order No. PSC-01-2514-FOF-WS. In 2011, we approved the leverage formula currently in effect by Order No. PSC-11-0287-PAA-WS.⁴

This order continues to use the leverage formula methodology established in Order No. PSC-01-2514-FOF-WS and reaffirmed in Order No. PSC-08-0846-FOF-WS. This methodology uses ROEs derived from financial models applied to an index of natural gas utilities. Based on the results of our annual review, there is an insufficient number of WAW utilities that meet the requisite criteria to assemble an appropriate proxy group. Therefore, since 2001, we have used natural gas utilities as the proxy companies for the leverage formula. There are many natural gas utilities that have actively traded stocks and forecasted financial data. We use natural gas utilities that derive at least 50 percent of their revenue from regulated rates. These utilities have market power and are influenced significantly by economic regulation. As explained below, the model results based on natural gas utilities are adjusted to reflect the risks faced by Florida WAW utilities.

Although Section 367.081(4)(f), F.S., authorizes us to establish a range of returns for setting the authorized ROE for WAW utilities, we may set an ROE for WAW utilities based on record evidence in any proceeding. If one or more parties file testimony in opposition to the use of the leverage formula, we will determine the appropriate ROE based on the evidentiary record in that proceeding. We have jurisdiction pursuant to Section 367.081, F.S.

DECISION

As stated above, pursuant to Section 367.081(4)(f), F.S., we must establish a leverage formula not less than once a year. In last year's leverage formula docket we elected to continue to use the 2011 leverage formula until the leverage formula is readdressed in 2013. We kept the 2011 leverage formula in place because federal policies had lowered interest rates to historically low rates, thereby increasing the slope of the leverage formula graph relative to previous years. The economic conditions recognized by this Commission in 2012 continue to persist in 2013.

In the instant docket, we have updated the leverage formula using current 2013 financial information and our approved methodology. The range of returns for the 2013 leverage formula is comparable to the 2011 leverage formula currently in effect. However, the updated 2013 leverage formula decreases the lower end of the allowed return on equity range by 86 basis points while increasing the upper end of the range by 13 basis points. This results in a spread of 342 basis points (7.88 percent to 11.29 percent) for the allowed return on common equity for WAW utilities. Last year's leverage formula resulted in a spread of 378 basis points (8.36 percent to 12.14 percent). This was the largest spread for the allowed return on common equity for WAW utilities in the approximately 30 years the leverage formula has been in use in Florida. In comparison, the spread of the range of returns for the 2011 leverage formula is 242 basis points.

⁴ <u>See</u> Order No. PSC-11-0287-PAA-WS, issued July 5, 2011, in Docket No. 110006-WS, <u>In re: Water and</u> 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.

While the spread of the range of returns has narrowed from last year's leverage formula result, the slope of the 2013 leverage formula graph is very similar to 2012's result. This is caused by the very low bond rates resulting from the Federal Reserve Board's various quantitative easing programs, which are still in effect. The Federal Reserve Board's quantitative easing programs have lowered interest rates and bond yields to historically low levels. The Baa3 bond rate of 5.60 percent, which includes a 50 basis point adjustment for small company risk and a 50 basis point adjustment for a private placement premium, is even lower than the Baa3 bond rate of 5.84 percent in 2012, which was the lowest since the inception of the Commission's leverage formula in 1982.

In addition, the overall weighted cost of capital for the proxy group used in the leverage formula model declined 86 basis points from 2011 to 2013 (8.74 percent versus 7.88 percent), yet the upper end of the required ROE in the leverage formula increased 13 basis points (11.29 percent versus 11.16 percent). A decrease in the overall weighted cost of capital coupled with a decline in the cost of debt to historically low levels while the cost of equity increases is anomalous. Because federal policies have lowered interest rates thereby increasing the slope of the leverage formula relative to previous years, the range of returns produced from the updated 2013 leverage formula is not optimal for determining the appropriate authorized ROE for WAW utilities at this time. An increase in the slope of the leverage formula means a given change in the slope of the leverage formula for the three years 2011 through 2013.



Chart 1

The 2011 leverage formula range of 8.74 percent to 11.16 percent is still reasonable for WAW utilities. Therefore, we find that the current leverage formula shall continue to be used for determining the return on equity for WAW utilities. Retaining the use of the current in-place leverage formula until the leverage formula is addressed again in 2014 is a reasonable alternative to updating the formula using current 2013 financial information.

In 2012, we voted to continue to use the 2011 leverage formula. In Order No. PSC-12-0339-PAA-WS, we found that the updated 2012 leverage formula is not optimal for determining the appropriate authorized ROE for WAW utilities. We found that the range of returns of 8.74 percent to 11.16 percent from the 2011 leverage formula appears to be more reasonable for determining the ROE for WAW utilities than the 2012 leverage formula and was the best alternative until the leverage formula is readdressed in 2013. We note that in 1996 we voted to continue to base the authorized ROE for WAW utilities on leverage formula instituted in 1995.⁵ In Order No. PSC-96-0729-FOF-WS, we found that the leverage formula range of returns from the prior year were still reasonable and found it appropriate to continue to base the authorized range of returns on common equity for WAW utilities on the leverage formula from the prior year.

We continue to believe the leverage formula is a sound, workable methodology that reduces the costs and administrative burdens in WAW rate cases by eliminating the need for cost of equity testimony. Many of the WAW utilities under our jurisdiction are small operations that find it beneficial to avoid the costs associated with presenting cost of equity testimony.

Although we find the current 2011 leverage formula shall continue to be used, we note that the updated model, using the most recent financial data, would produce the following leverage formula:

Return on Common Equity = $5.60\% + (2.279 \div Equity Ratio)$

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

Range: 7.88% @ 100% equity to 11.29% @ 40% equity

In conjunction with the 2013 leverage formula, the returns on common equity shall be capped at 11.29 percent for all WAW utilities with equity ratios less than 40 percent to discourage imprudent financial risk. This cap is consistent with the methodology in Order No. PSC-08-0846-FOF-WS.

In developing the updated leverage formula, we used the same methodologies used in the 2011 docket. We note that the leverage formula depends on four basic assumptions:

1) Business risk is similar for all WAW utilities;

⁵ <u>See</u> Order No. PSC-96-0729-FOF-WS, issued May 31, 1996, in Docket No. 960006-WS, <u>In re: Annual</u> reestablishment of authorized range of returns on common equity of water and wastewater utilities, pursuant to <u>Section 367.081(4)(f), F.S.</u>

- 2) The cost of equity is an exponential function of the equity ratio but a linear function of the debt to equity ratio over the relevant range;
- 3) The marginal weighted average cost of investor capital is constant over the equity ratio range of 40 percent to 100 percent; and
- 4) The debt 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 percent to 100 percent.

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

The leverage formula relies on two ROE models. We adjusted the results of these models to reflect differences in risk and debt cost between the index of companies used in the models and 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 (NG) utilities that have publicly traded stock and are followed by the Value Line Investment Survey (Value Line). This DCF model is an annual model and uses prospective growth rates.
- The index consists of eight NG companies that derive at least 50 percent 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 for the index of NG utilities. The market return for the 2013 leverage formula was calculated using a quarterly DCF model with stock prices on April 4, 2013.

We averaged the returns of the above models and adjusted the result as follows:

- A bond yield differential of 57 basis points is added to reflect the difference in yields between an A/A2 rated bond, which is the median 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 because 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 derivation of the leverage formula using the current methodology with updated financial information is presented in Attachment 1.

For administrative efficiency, the leverage formula is used to determine the appropriate return for an average Florida WAW utility. Traditionally, we have applied the same leverage formula to all WAW utilities. As is the case with other regulated companies under our jurisdiction, we have discretion in the determination of the appropriate ROE based on the evidentiary record in any proceeding. If one or more parties file testimony in opposition to the use of the leverage formula, we will determine the appropriate ROE based on the evidentiary record in that proceeding.

Based on the aforementioned, we find that the current range of returns on common equity of 8.74 percent to 11.16 percent is still reasonable for WAW utilities. As such, the current leverage formula authorized by us in Order No. PSC-12-12-0339-PAA-WS shall remain unchanged until the leverage formula is readdressed in 2014.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the current 2011 leverage formula authorized by us in Order No. PSC-12-0339-PAA-WS continue to be used until the leverage formula is readdressed in 2014. It is further

ORDERED that the current range of returns on common equity of 8.74 percent to 11.16 percent is hereby approved for WAW utilities as set forth in this Order. It is further

ORDERED that the returns on common equity shall be capped at 11.16 percent for all water and wastewater utilities with equity ratios less than 40 percent in order to discourage financial risk. It is further

ORDERED that Attachment 1 is incorporated herein by reference. 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 Commission Clerk, 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

ORDERED that in the event this Order becomes final, this docket shall remain open to allow Commission 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 3rd day of June, 2013.

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ANN COLE Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399 (850) 413-6770 www.floridapsc.com

Copies furnished: A copy of this document is provided to the parties of record at the time of issuance and, if applicable, interested persons.

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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 Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on June 24, 2013.

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 LEVERAGE FORMULA RESULTS

	<u>Updated</u> <u>Results</u> (2013)	Currently in Effect (2011)
(A) DCF ROE for Natural Gas Index(B) CAPM ROE for Natural Gas IndexAVERAGE	8.19% <u>9.42%</u> <u>8.80%</u>	8.25% <u>9.40%</u> <u>8.83%</u>
Bond Yield Differential Private Placement Premium Small-Utility Risk Premium Adjustment to Reflect ROE at 40% Equity Ratio	0.57% 0.50% 0.50% <u>0.92%</u>	0.57% 0.50% 0.50% <u>0.76%</u>
Cost of Equity for Average Florida WAW Utility with a capital structure containing a 40% Equity Ratio	<u>11.29%</u>	<u>11.16%</u>
1 2	7.13% + (1.610 3.74% to 11.16%	•• • /
1 •	5.60% + (2.279 - 7.88% to 11.29%	• • /

MARGINAL COST OF INVESTOR CAPITAL (2013 Leverage Formula Result)

Average Marginal Cost Rate of the Natural Gas Utility Proxy Group

Capital Component	Ratio	Marginal Cost Rate	Weighted Marginal Cost Rate
Common Equity Total Debt	47.71% <u>52.29%</u> 100.0%	10.37% 5.60% *	4.95% <u>2.93%</u> 7.88%

Average Marginal Cost Rate at a 40% Equity Ratio

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 $5.60\% + (2.279 \div 0.40) = 11.29\%$

Capital Component	Ratio	Marginal <u>Cost Rate</u>	Weighted Marginal Cost Rate
Common Equity Total Debt	40.00% <u>60.00%</u> 100.00%	11.29% 5.60%*	4.52% <u>3.36%</u> 7.88%

Common Equity Ratio = Common Equity ÷ (Common Equity + Preferred Equity + Long-Term Debt + Short-Term Debt)

* Assumed Baa3 rate for March 2013 plus a 50 basis point private placement premium and a 50 basis point small utility risk premium.

Sources: Moody's Credit Perspectives and Value Line Selection and Opinion

ANNUAL DISCOUNTED CASH FLOW MODEL

NATURAL GAS UTILITY INDEX										ST	OCK PRICE	Ξ
									_	MARC	H 11 - APR	IL 10
COMPANY	DIV0	DIVI	DIV2	DIV3	DIV4	EPS4	ROE4	GR1-4	GR4+	HI-PR	LO-PR	AVG-PR
AGL RESOURCES INC.	1.88	1.92	1.96	2.00	2.04	4.10	6.00	1.0204	1.0301	43.21	40.44	41.825
ATMOS ENERGY CORPORATION	1.40	1.42	1.45	1.47	1.50	3.00	8.50	1.0184	1.0425	43.53	40.68	42.105
LACLEDE GROUP, INC.	1.74	1.76	1.78	1.80	1.82	3.75	10.50	1.0112	1.0540	44.09	40.58	42.335
NORTHWEST NATURAL GAS CO.	1.83	1.87	1.91	1.96	2.00	3.25	11.50	1.0227	1.0442	45.48	43.30	44.390
PIEDMONT NATURAL GAS CO., INC.	1.23	1.27	1.31	1.35	1.39	1.90	11.00	1.0306	1.0295	34.70	32.45	33.575
SOUTH JERSEY INDUSTRIES, INC.	1.82	1.98	2.13	2.28	2.45	4.50	15.50	1.0736	1.0706	57.94	54.11	56.025
SOUTHWEST GAS CORPORATION	1.32	1.42	1.48	1.54	1.60	3.75	10.50	1.0406	1.0602	49.24	46.63	47.935
WGL HOLDINGS, INC.	1.66	1.71	1.75	1.79	1.83	2.65	9.50	1.0229	1.0294	44.78	42.88	43.830
AVERAGE	1.6100	1.6688	1.7198	1.7731	1.8288	3.3625	10.3750	1.0300	1.0451			44.003
					1.9112			Stock price i	ncluding a fou	r percent flot	ation cost:	42.2424
		Annual DC	F Result:	8.19%								
Cash Flows: 1.5017	1.4365	1.3685	1.3042	1.2475	35.3841							

Present Value of Cash Flows: 42.2424

NOTE: The cash flows for this multi-stage DCF Model are derived using the average forecasted dividends and the near term and long term growth rates. The discount rate equates the cash flows with the average stock price less flotation cost.

\$42.24 = Average stock price from March 11, 2013, through April 10, 2013, with a 4 percent flotation cost.

8.19% = Cost of equity required to match the current stock price with the expected cash flows.

Sources:

1. Stock Prices - Yahoo Finance.

2. DPS, EPS, ROE - Value Line Ratings and Reports issued March 8, 2013.

CAPITAL ASSET PRICING MODEL

CAPM analysis formula

K	=	RF + Beta(MR - RF)
K	=	Investor's required rate of return
RF	=	Risk-free rate (Blue Chip forecast for Long-term Treasury bond,
		April 1, 2013)
Beta	=	Measure of industry-specific risk (Average for water utilities followed by
		Value Line)
MR		Market return (Value Line Investment Survey For Windows, April 2013)
		9.42% = 3.48% + 0.66(12.14% - 3.48%) + 0.20%

Note: We calculated the market return using a quarterly DCF model for a large number of dividend paying stocks followed by Value Line. For April 2013, the result was 12.14%. We also added 20 basis points to the CAPM result to allow for a four-percent flotation cost.

BOND YIELD DIFFERENTIALS

120 Month Average Spread		0.1422		0.1422		0.1422		0.1422	
MONTH/YEAR	A2	SPREAD	A3	SPREAD	Baal	SPREAD	Baa2	SPREAD	Baa3
March 2013	4.110	0.115	4.225	0.115	4.340	0.115	0.455	0.115	4.570

Natural Gas Distribution Utility Companies	S&P Bond Rating	% of Gas Revenue	Value Line Market Capital (millions)	Equity Ratio	Value Line Beta
AGL Resources Inc.	BBB+	68%	\$ 4,944.02	40.91%	0.75
Atmos Energy Corporation	BBB+	62%	\$ 3,864.13	46.51%	0.70
Laclede Group, Inc.	A	56%	\$ 963.44	58.11%	0.55
Northwest Natural Gas Co.	A+	56%	\$ 1,177.27	45.39%	0.60
Piedmont Natural Gas Co., Inc.	A	100%	\$ 2,384.19	43.39%	0.65
South Jersey Industries, Inc.	BBB+	58%	\$ 1,710.84	43.27%	0.65
Southwest Gas Corporation	A-	74%	\$ 2,189.80	47.02%	0.75
WGL Holdings, Inc.	A+	51%	\$ 2,277.81	57.07%	0.65
Average:	А			47.71%	0.66

PROXY GROUP STATISTICS AND FACTS

Sources:

Value Line Investment Survey for Windows April 2013 S.E.C. Forms 10Q and 10K for proxy group companies AUS Utilities Report issued April 1, 2013 Standard & Poor's RatingsDirect