ORIGINAL

STATE OF FLORIDA
OFFICE OF THE PUBLIC COUNSEL

c/o The Florida Legislature
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JACK SHREVE
PUBLIC COUNSEL

November 12, 2002

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Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket No. ~~020386-GU~~ 020384-GU (18)

Dear Ms. Bayo:

Enclosed for filing in the above-referenced docket are the original and 15 copies of the Rebuttal Testimony of Mark A. Cicchetti on Behalf of the Citizens of the State of Florida.

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

Sincerely,

H F. Mann

H F. Mann
Associate Public Counsel

HFM:bsr

Enclosures

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for rate increase	)	
Tampa Electric Company d/b/a	)	Docket No. 020384-GU
Peoples Gas System	)	Filed: November 12, 2002
	)	

REBUTTAL TESTIMONY

OF

MARK A. CICCHETTI

On Behalf of the Citizens of the State of Florida

Jack Shreve
Public Counsel

Office of Public Counsel
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Attorney for the Citizens
of the State of Florida

DOCUMENT NUMBER DATE
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FPSC-COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY

OF MARK A. CICCHETTI

ON BEHALF OF

THE OFFICE OF PUBLIC COUNSEL

DOCKET NO. 020384-GU

Q. PLEASE STATE YOUR NAME AND ADDRESS

A. My name is Mark Anthony Cicchetti and my business address is 2931 Kerry Forest Parkway, Suite 202, Tallahassee, Florida 32309.

Q. ARE YOU THE SAME MARK ANTHONY CICCHETTI WHO PREVIOUSLY FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to provide an evaluation of the analysis of Dr. Roger A. Morin regarding the fair and reasonable rate of return on common equity which the Commission should allow Peoples Gas System ("Peoples") for the purpose of setting rates.

Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.

A. The cost of common equity of 11.75% determined by Dr. Morin overstates the cost of common equity for Peoples. Dr. Morin's analysis incorporates methodologies that are contrary to generally accepted financial theory and therefore should be discounted by the Commission.

Q. DR. MORIN CLAIMS HE IS PRESENTING AN "INDEPENDENT ANALYSIS" OF THE FAIR AND REASONABLE RATE OF RETURN ON EQUITY (MORIN, PAGE 3, LINE 15). DO YOU AGREE?

A. No. Webster's Dictionary defines independent as: not subject to the control, influence, or determination of another; not depending on another for financial support; not subject to bias, persuasion, or influence (See Webster's New Twentieth Century Dictionary, Second Edition). When a person is testifying on behalf of a party to an adversarial proceeding, that person, by definition, is not unbiased -- particularly if that person is being paid by one of the adversaries in the proceeding.

Q. DR. MORIN RELIED ON THE ACTUAL YIELD ON LONG-TERM TREASURY BONDS OF 5.7% FOR USE IN HIS CAPITAL ASSET PRICING MODEL ("CAPM") RISK PREMIUM APPROACH AND RISK PREMIUM ANALYSES (MORIN, PAGE 17, LINE 19). WHAT IS THE CURRENT YIELD ON LONG-TERM TREASURY BONDS?

A. The current yield on long-term Treasury bonds is 4.79%. Consequently, using Dr. Morin's own methodology, the results of his CAPM Risk Premium approach and Risk Premium analyses are overstated by 91 basis points.

Q. IN HIS CAPM ANALYSIS, DR. MORIN RELIED ON A MARKET RISK PREMIUM OF 7.5% WHICH WAS BASED ON THE HISTORICAL EARNED RETURNS OF A BROAD MARKET SAMPLE OF COMMON STOCKS OVER THE RETURNS OF LONG-TERM TREASURY BONDS AND A FORWARD-LOOKING

STUDY (MORIN, PAGE 19, LINE 7). IS IT APPROPRIATE TO RELY ON A RISK PREMIUM ANALYSIS THAT USES EARNED RETURNS RATHER THAN EXPECTED RETURNS IN DETERMINING RISK PREMIUMS?

A. No. Required return is a function of expectations and not a function of ex post performance. Actual performance may deviate substantially from what was expected but it is expectations relative to requirements that determine if an investment should be made. Relying on earned returns in the ratemaking process as the basis for required returns can produce incorrect results. For example, just because a company had an earned return on equity of either 5% or 50% does not mean that the company's cost of equity was either 5% or 50%. Furthermore, relying on earned returns as a proxy for required returns can produce nonsensical results. For example, Morin Exhibit RAM-3 shows annual equity risk premiums that range from negative 27.98% to positive 61.21%. However, the return to equity owners is a residual return (i.e., equity owners do not earn a return until the debt holders have been paid). Therefore, common equity is riskier than debt. It is illogical to think that in any year the cost of equity was 27.89% less than the cost of debt. If you use bad ingredients to bake a cake, you should not expect the result to be a good cake. Consistent with theory, I have never seen an appropriately derived risk premium analysis produce a cost of equity less than the relevant cost of debt.

Finally, in "The Risk Premium Approach to Measuring a Utility's Cost of Equity" (a Public Utility Research center working paper written in August 1984), Brigham, Shome and Vison state, ". . . we concluded that, for cost of capital estimation purposes, risk premiums must be based on expectations, not on past, realized holding period returns."

Q. IN DR. MORIN'S PROSPECTIVE APPROACH TO DERIVING THE MARKET RISK PREMIUM FOR HIS CAPM ANALYSIS, HE RELIED ON A DCF

ANALYSIS FOR THE AGGREGATE MARKET THAT INCORPORATED EXPECTED GROWTH IN EARNINGS AS A PROXY FOR THE EXPECTED GROWTH RATE FOR DIVIDENDS (MORIN, PAGE 21, LINE 8). IS THIS APPROPRIATE?

A. No. It is inappropriate to rely on expected earnings growth as a proxy for expected dividend growth. The discounted cash flow (DCF) model is a dividend discounting model. According to DCF theory, the cost of equity is the discount rate (required rate) that equates the present value of the expected cash flows associated with a share of stock to the price of the stock. The cash flows expected to be received from a share of stock consist of expected dividends plus the price investors expect to receive when they sell the stock. The market rice in any period (t) will equal the present value of the dividend and sales price expected after period (t). Applying this concept to all future sales prices, the current stock price can be shown to equal the present value of all dividends expected to be paid in the future, including any liquidating dividend. Therefore, expected dividend growth should be used when determining the cost of common equity using a DCF model.

The expected growth in earnings is not a valid proxy for the expected growth in dividends because all earnings are not paid out as dividends when they are earned. A fundamental principle of the DCF approach is that investors value a dollar received in the future less than a dollar received today. This is because, if they had a dollar today, they could invest it in an interest-earning account and increase their wealth. This principle is called the time value of money. Generally, utility companies increase dividends in a lock-step fashion and only when it is anticipated that a higher level of earnings can support a higher level of dividends. Not properly accounting for the timing and amount of expected cash flows when preparing a discounted cash flow analysis produces an incorrect result.

Interestingly, Dr. Morin's direct testimony (Page 35, line 1) explains the relevance of dividends and expected dividend growth to DCF theory. However, when performing his analyses, Dr. Morin only refers to "growth" and incorporates earnings growth in the growth variable.

According to *Value Line*, the companies used by Dr. Morin in his DCF analyses expect higher growth in earnings relative to growth in dividends over the next five years. Additionally, as shown in Dr. Morin's direct testimony (Page 21, line 11), there is a significant 8.5 percentage point difference (13.8% - 5.3%) between the expected growth in earnings and the expected growth in dividends. This significant difference between expected growth in earnings and expected growth in dividends sheds a bright light on the flaws associated with relying on the expected growth in earnings as a proxy for expected growth in dividends. Because Dr. Morin relied on expected earnings growth as a proxy for expected dividend growth, the dividend growth variable in Dr. Morin's DCF analysis is substantially overstated. Consequently, his DCF-determined cost of equity is substantially overstated.

Q. DR. MORIN PERFORMED AN HISTORICAL RISK PREMIUM ANALYSIS FOR THE NATURAL GAS DISTRIBUTION INDUSTRY (MORIN, PAGE 31, LINE 16). DID THIS ANALYSIS INCLUDE THE USE OF HISTORICAL EARNED RETURNS AS A PROXY FOR REQUIRED RETURNS BASED ON EXPECTATIONS?

A. Yes, and for the reasons cited above regarding the inappropriateness of using ex post returns as a proxy for expectations, Dr. Morin's Risk Premium analyses overstate the cost of equity.

Q. DR. MORIN PERFORMED A RISK PREMIUM ANALYSIS USING RETURNS ALLOWED BY REGULATORY COMMISSIONS AS THE REQUIRED RETURN ON EQUITY (MORIN, PAGE 32, LINE 8). IS THIS APPROPRIATE?

A. No. The required return on equity is a function of relevant risk. Using allowed returns to determine a utility's cost of equity is circular logic. If every regulatory commission relies on every other regulatory commission's allowed returns, which regulatory commission has determined the appropriate required return based on relevant risk? Using returns allowed by other regulatory commissions as the required return for a regulated utility is simply a defective shortcut way to set an allowed return based on what "everybody else" is doing rather than logically evaluating expected cash flow and market prices. Additionally, many of the allowed returns in Dr. Morin's study are old and do not reflect current market condition. Furthermore, Dr. Morin's analysis does not differentiate between allowed returns and negotiated returns. In a negotiated settlement, the parties to a rate case may be willing to accept an allowed return on common equity that does not reflect the cost of equity in return for other concessions or advantages. Consequently, Dr. Morin's risk premium analysis using allowed returns should be discarded.

Q. DR. MORIN PERFORMED DCF ANALYSES FOR GAS DISTRIBUTION COMPANIES AND FOR COMBINATION GAS AND ELECTRIC COMPANIES (MORIN, EXHIBITS RAM-4, RAM-5). DID THESE ANALYSES RELY ON PROJECTED EARNINGS GROWTH AS A PROXY FOR EXPECTED DIVIDEND GROWTH?

A. Yes, and for the reasons cited above regarding the inappropriateness of using earnings growth as a proxy for expected dividend growth Dr. Morin's DCF analyses overstate the cost of equity. It should be noted, in his DCF analyses for the regulated utilities, Dr. Morin did not average expected dividend growth and expected earnings growth as he did for his analysis of market overall. One has to wonder if the difference in the methodologies has to do with the fact that the expected earnings growth of the regulated utilities is significantly less (7.1% versus 13.8%) than for the market overall. Had Dr. Morin followed the same DCF methodology for the regulated companies as his analysis of the market overall his DCF results for the regulated companies would have been much lower.

Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.

A. Dr. Morin's analysis of the required return on common equity for Peoples relied on methodologies that are inconsistent with generally accepted financial theory and which cause his results to significantly overstate cost of equity. Dr. Morin relied on historical earned returns instead of expected returns in his CAPM and Risk Premium analyses, he incorporated expected earnings growth instead of expected dividend growth in his DCF analyses, and Dr. Morin used old returns allowed by other Commissions in arriving at his result. Additionally, updating Dr. Morin's analysis with current interest rates reduces his recommended return by approximately a full percentage point. Consequently, the Commission should not rely on Dr. Morin's recommendation in determining the allowed return on common equity for Peoples.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

DOCKET NO. 020384-GU
CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the Rebuttal Testimony of Mark A. Cicchetti has been furnished by U.S. Mail or hand-delivery* to the following parties on this 12th day of November, 2002.

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