BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. 160186-EI

PETITION FOR RATE INCREASE BY GULF POWER COMPANY.
_____/

DOCKET NO. 160170-EI

PETITION FOR APPROVAL OF 2016 DEPRECIATION AND DISMANTLEMENT STUDIES, APPROVAL OF PROPOSED DEPRECIATION RATES AND ANNUAL DISMANTLEMENT ACCRUALS AND PLANT SMITH UNITS 1 AND 2 REGULATORY ASSET AMORTIZATION, BY GULF POWER COMPANY.
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VOLUME 6
(Pages 1274 through 1464)

PROCEEDINGS: HEARING

COMMISSIONERS PARTICIPATING: CHAIRMAN JULIE I. BROWN
COMMISSIONER ART GRAHAM
COMMISSIONER RONALD A. BRISÉ
COMMISSIONER DONALD J. POLMANN

DATE: Monday, March 20, 2017

TIME: Commenced at 1:00 p.m.
Concluded at 2:53 p.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: LINDA BOLES, CRR, RPR
Official FPSC Reporter
(850) 413-6734

APPEARANCES: (As heretofore noted.)

I N D E X

WITNESSES

EXHIBITS

NUMBER:	ID.	ADMTD.

No exhibits in this volume

GULF POWER COMPANY

Before the Florida Public Service Commission
Rebuttal Testimony of
James H. Vander Weide, Ph.D.
Docket No. 160186-EI
In Support of Rate Relief
February 8, 2017

I. INTRODUCTION AND PURPOSE

Q. Please state your name, title, and business address.

A. My name is James H. Vander Weide. I am President of Financial Strategy Associates, a firm that provides strategic and financial consulting services to business clients. My business address is 3606 Stoneybrook Drive, Durham, North Carolina 27705.

Q. Are you the same James H. Vander Weide who provided direct testimony in this proceeding?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. I have been asked by Gulf Power Company (Gulf or the Company) to review the direct testimonies and cost of capital recommendations of Dr. J. Randall Woolridge and Mr. Michael P. Gorman. Dr. Woolridge's testimony is presented on behalf of the Florida Office of Public Counsel (OPC), and Mr. Gorman is appearing on behalf of the Federal Executive Agencies (FEA).

Q. Is there anything in the testimonies of Dr. Woolridge and Mr. Gorman that causes you to change your recommended cost of equity for Gulf?

A. No, there is not. I continue to recommend that Gulf be allowed to earn an 11.0 percent rate of return on equity.

Q. Are you sponsoring any rebuttal exhibits?

A. Yes, I am sponsoring Exhibit JVW-3, Schedule 1. This exhibit was prepared under my direction and control, and the information contained therein is true and correct to the best of my knowledge and belief.

II. REBUTTAL OF DR. WOOLRIDGE

Q. What is Dr. Woolridge's recommended rate of return on equity for Gulf?

A. Dr. Woolridge recommends that Gulf be allowed an opportunity to earn a rate of return on equity equal to 8.875 percent. (Woolridge at 2 – 3)

Q. What capital structure and senior capital cost rates does Dr. Woolridge recommend for Gulf?

A. Dr. Woolridge proposes a capital structure of 1.67 percent short-term debt, 42.80 percent long-term debt, 5.53 percent preferred stock, and 50.00 percent common equity. (Woolridge at 2)

Q. Does Dr. Woolridge also recommend an overall rate of return for investor-supplied capital?

A. Yes. Dr. Woolridge recommends an overall rate of return on investor-supplied capital equal to 6.71 percent. (Woolridge Exhibit JRW-1)

Q. What areas of Dr. Woolridge's testimony will you address in your rebuttal testimony?

A. I will address Dr. Woolridge's: (1) discounted cash flow (DCF) analysis; (2) Capital Asset Pricing Model (CAPM) analysis; (3) comments on the relationship between utilities' rates of return on equity and their market-to-book ratios; and (4) comments on my direct testimony.

A. DCF ANALYSIS

Q. What is the DCF model?

A. The DCF model is a model of stock valuation that assumes that a company's stock price is equal to the present discounted value of all expected future dividends investors expect to receive from owning the stock. Assuming that dividends grow at a constant annual rate, *g,* the resulting cost of equity equation is $k = D_1/P_s + g$, where k is the cost of equity, D_1 is the expected next period annual dividend, P_s is the current price of the stock, and g is the constant annual growth rate in earnings, dividends, and book value per share. The term D_1/P_s is called the expected dividend yield component of the annual DCF model, and the term g is called the expected growth component of the annual DCF model.

Q. Does Dr. Woolridge use the DCF model to estimate Gulf's cost of equity?

A. Yes, he does.

Q. What cost of equity results does Dr. Woolridge obtain from his application of his DCF model?

A. Dr. Woolridge obtains a cost of equity result of 8.5 percent for his Electric Proxy Group and a DCF result of 9.0 percent for the Vander Weide Proxy Group. (Woolridge Exhibit JRW-10, page 1 of 6)

Q. What DCF model does Dr. Woolridge use to estimate Gulf's cost of equity?

A. Dr. Woolridge uses an annual DCF model of the form, $k = D_0(1+.5g)/P_0 + g$, where k is the cost of equity, D_0 is the current annual dividend, P_0 is the current stock price, and g is the average expected future growth in the company's earnings and dividends.

Q. What are the basic assumptions of Dr. Woolridge's annual DCF model?

A. Dr. Woolridge's annual DCF model is based on the assumptions that: (1) a company's stock price is equal to the present value of the future dividends investors expect to receive from their investment in the company; (2) dividends are paid annually; (3) dividends, earnings, and book values are expected to grow at the same constant rate forever; and (4) the first dividend is received one year from the date of the analysis.

Q. Do you agree with Dr. Woolridge's use of an annual DCF model to estimate Gulf's cost of equity?

A. No. Dr. Woolridge's annual DCF model is based on the assumption that companies pay dividends only at the end of each year. Since Dr. Woolridge's proxy companies all pay dividends quarterly, Dr. Woolridge should have used the quarterly DCF model described in Exhibit JVW-2, Appendix 2 of my direct testimony to estimate Gulf's cost of equity.

Q. Why is it unreasonable to use an annual DCF model to estimate the cost of equity for companies that pay dividends quarterly?

A. It is unreasonable to apply an annual DCF model to companies that pay dividends quarterly because: (1) the DCF model is based on the assumption that a company's stock price is equal to the present value of the expected future dividends associated with investing in the company's stock; and (2) the annual DCF model cannot be derived from this assumption when dividends are paid quarterly. I note that this Commission also uses a quarterly DCF model when estimating the cost of equity for water and wastewater utilities. *See*, for example, Memorandum dated June 4, 2015, in Docket No. 150006-WS – 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., which states that the "market return for the 2015 leverage formula was calculated using a quarterly DCF model."

Q. Does Dr. Woolridge acknowledge that one must recognize the assumptions of the DCF model when estimating the model's inputs?

A. Yes. Dr. Woolridge states, "In general, one must recognize the assumptions under which the DCF model was developed in estimating its components (the dividend yield and expected growth rate)." (Woolridge at 49)

Q. Recognizing your disagreement with Dr. Woolridge's use of an annual DCF model, did Dr. Woolridge apply the annual DCF model correctly?

A. No. Dr. Woolridge's annual DCF model is based on the assumption that dividends will grow at the same constant rate forever. Under the assumption that dividends will grow at the same constant rate forever, the cost of equity is given by the equation, $k = D_0 (1 + g) / P_0 + g$, where D_0 is the current annualized dividend, P_0 is the stock price, and g is the expected constant annual growth rate. Thus, the correct first period dividend in the annual DCF model is the current annualized dividend multiplied by the factor, (1 + growth rate). Instead, Dr. Woolridge uses the current annualized dividend multiplied by the factor (1 + 0.5 times growth rate) as the first period dividend in his DCF model. This incorrect procedure, apart from other errors in his methods, causes him to underestimate Gulf's cost of equity.

Q. Does Dr. Woolridge apply his annual DCF model directly to Gulf?

A. No. Because Gulf's stock is not publicly traded, Dr. Woolridge applies his annual DCF model to two groups of electric utilities, including a group of electric utilities that meet Dr. Woolridge's proxy selection criteria (see

Woolridge at 29) and the electric utilities in the comparable group I use to estimate Gulf's cost of equity in my direct testimony.

Q. What data does Dr. Woolridge consider for estimating the dividend yield component of his annual DCF model?

A. Dr. Woolridge considers the average monthly dividend yield for the past six months and dividend yields calculated by dividing the current annual dividend by stock prices over the most recent thirty-day, ninety-day, and 180-day periods. (Woolridge at 49)

Q. What data does Dr. Woolridge consider for estimating the expected future growth component of the DCF cost of equity?

A. Dr. Woolridge considers Value Line data on historical growth rates in earnings, dividends, and book value, as well as Value Line data on projected growth rates in earnings, dividends, and book value. For most of his proxy companies, Value Line's average historical growth rates are significantly less than its projected growth rates. Dr. Woolridge also considers analysts' forecasts of future growth provided by Yahoo, Reuters, and Zacks, and prospective growth estimates based on Value Line's estimates of retention ratios and rates of return on book equity. (Woolridge at 51-52)

Q. Do you agree with Dr. Woolridge's use of historical growth rates to estimate investors' expectation of future growth in the DCF model?

A. No. Historical growth rates are inherently inferior to analysts' growth

forecasts because analysts' forecasts already incorporate all relevant information regarding historical growth rates and also incorporate the analysts' knowledge about current conditions and expectations regarding the future. My studies, described in my direct testimony at pp. 27 – 29, indicate that investors use analysts' earnings growth forecasts in making stock buy and sell decisions rather than historical or internal growth rates such as those presented by Dr. Woolridge.

Q. Does Dr. Woolridge recognize the inherent problems in using historical growth rates to estimate investors' expected future growth in the DCF model?

A. Yes. Dr. Woolridge recognizes the inherent problems in using historical growth rates when he states:

> However, one must use historical growth numbers as measures of investors' expectations with caution. In some cases, past growth may not reflect future growth potential. Also, employing a single growth rate number (for example, for five or ten years) is unlikely to accurately measure investors' expectations, due to the sensitivity of a single growth rate figure to fluctuations in individual firm performance as well as overall economic fluctuations (i.e., business cycles). However, one must appraise the context in which the growth rate is being employed. According to the conventional DCF model, the expected return on a security is equal to the sum of the dividend yield and the expected long-term growth in dividends.

> Therefore, to best estimate the cost of common equity capital using the conventional DCF model, one must look to long-term growth rate expectations. [Woolridge at 52]

Q. How do Value Line's projected growth rates for Dr. Woolridge's proxy groups of electric utilities compare to Value Line's historical growth rates for these companies?

A. For the Electric Proxy Group, Value Line's median projected growth rate, 4.9 percent, is seventy basis points higher than the median 4.2 percent Value Line historical growth rate employed by Dr. Woolridge. For the Vander Weide proxy group, the median Value Line projected growth rate, 5.2 percent, is 100 basis points higher than the 4.2 percent median Value Line historical growth rate employed by Dr. Woolridge. (Woolridge Exhibit JRW-10, pp. 3, 4, and 6)

Q. How do the analysts' growth rates for Dr. Woolridge's groups of proxy companies compare to Value Line's historical growth rates for these companies?

A. For the Electric Proxy Group, the median analysts' growth rate, 5.4 percent, is 120 basis points higher than the median Value Line historical growth rate employed by Dr. Woolridge, 4.2 percent. For the Vander Weide proxy group, the median analysts' growth rate, 5.7 percent, is 150 basis points higher than the median Value Line historical growth rate employed by Dr. Woolridge, 4.2 percent. (Woolridge Exhibit JRW-10, pp. 3, 5, and 6)

Q. What is the internal growth method of estimating the growth component of the DCF cost of equity?

A. The internal growth method estimates expected future growth by multiplying a company's retention ratio, "b," times its expected rate of return on equity, "r." Thus, "g = b x r," where "b" is the percentage of earnings that are retained in the business and "r" is the expected rate of return on equity.

Q. Do you agree with the use of the internal growth method to estimate investors' expected future growth in the DCF model?

A. No. The internal growth method is logically circular because it requires an estimate of the expected rate of return on equity, "r," in order to estimate the cost of equity using the DCF model. Yet, for regulated companies such as Gulf, the allowed rate of return on equity is set equal to the cost of equity.

Q. How does Dr. Woolridge estimate the expected rate of return on equity for each proxy company in his sustainable or internal growth analysis?

A. Dr. Woolridge uses Value Line's forecast of each company's rate of return on equity for the period 2013 – 2015 to the period 2019 – 2021 as his estimate of the expected rate of return on equity for each company.

Q. What rate of return on equity does Dr. Woolridge assume in his calculation of expected growth using his internal growth method?

A. Dr. Woolridge assumes a median rate of return on equity equal to 10.0 percent for the Electric Proxy Group and 10.5 percent for the Vander Weide proxy group. (Woolridge Exhibit JRW-10, p. 4)

Q. Is it reasonable to assume that Dr. Woolridge's proxy companies will earn a rate of return on equity equal to 10.0 percent to 10.5 percent when he is recommending that they be allowed to earn only a return of 8.875 percent?

A. No. Investors are well aware that electric utilities are regulated by rate of return regulation. If investors truly believed that the utilities' cost of equity were equal to Dr. Woolridge's recommended 8.875 percent, they would forecast that the utilities would earn 8.875 percent on equity. Thus, Dr. Woolridge's recommended 8.875 percent rate of return on equity is inconsistent with his own assumed 10.0 percent to 10.5 percent earned rate of return on equity for the proxy groups.

Q. Does Dr. Woolridge's internal growth method recognize that, in addition to growth from retained earnings, the companies in his proxy group can also grow by issuing new equity at prices above book value?

A. No. Dr. Woolridge's internal growth method underestimates the expected future growth of his proxy companies because it neglects the possibility that the companies can also grow by issuing new equity at prices above book value. Because all of the proxy companies are selling at prices in excess of book value, and Value Line forecasts that many of them will issue new equity over the next several years, Dr. Woolridge's failure to recognize the "external" component of future growth causes to him to underestimate his proxy companies' expected future growth even more.

Q. Does Dr. Woolridge's internal growth method recognize that Value Line's reported rates of return on equity generally understate each company's average rate of return on equity for the year?

A. No. Dr. Woolridge fails to recognize that Value Line calculates its reported rates of return on equity by dividing a company's net income by end of year equity, whereas most financial analysts calculate a company's rate of return on equity by dividing net income by the average equity for the year. In the general case in the utility industry where a company's equity is increasing, Value Line's reported ROEs will understate the average ROE for the year. Thus, Dr. Woolridge's failure to recognize that Value Line's reported ROEs understate each company's average ROE for the year is an additional factor causing him to underestimate Gulf's cost of equity.

Q. Do you agree with Dr. Woolridge's use of analysts' growth forecasts to estimate the expected growth component of his DCF model?

A. Yes. As discussed in my direct testimony, I recommend the use of analysts' growth forecasts to estimate investors' expected growth in the DCF model. The DCF model requires the growth forecasts of investors, and there is considerable empirical evidence that investors use analysts' growth forecasts to estimate future earnings growth. (Vander Weide Direct at 26 – 29)

B. CAPITAL ASSET PRICING MODEL ANALYSIS

Q. What is the CAPM?

A. The CAPM is an equilibrium model of expected returns on risky securities in which the expected or required return on a given risky security is equal to the risk-free rate of interest plus the security's "beta" times the market risk premium:

Expected return = Risk-free rate + (Security beta x Market risk premium).

The risk-free rate in this equation is the expected rate of return on a risk-free government security, the security beta is a measure of the company's risk relative to the market as a whole, and the market risk premium is the premium investors require to invest in the market basket of all securities compared to the risk-free security.

Q. How does Dr. Woolridge use the CAPM to estimate Gulf's cost of equity?

A. The CAPM requires estimates of the risk-free rate, the company-specific risk factor, or beta, and either the required return on an investment in the market portfolio, or the risk premium on the market portfolio compared to an investment in risk-free government securities. For the risk-free rate, Dr. Woolridge uses an average 4.0 percent yield on 30-year Treasury bonds (Woolridge at 62); for the company-specific risk factor or beta, Dr. Woolridge uses the median Value Line beta for the proxy utility groups equal to 0.70 (Woolridge at 64); and for the required return or risk premium on the market portfolio, Dr. Woolridge employs an average 5.5 percent risk premium he obtains from his review of the risk premium literature. (Woolridge at 68)

Q. What CAPM result does Dr. Woolridge obtain for his proxy companies?

A. For both the Electric Proxy Group and for the Vander Weide proxy group, Dr. Woolridge obtains a CAPM result of 7.9 percent. (Woolridge at 70)

Q. Does Dr. Woolridge believe that the result of his CAPM analysis is a reasonable estimate of Gulf's cost of equity?

A. No. Dr. Woolridge reports results of 8.5 percent and 9.0 percent for his DCF studies and a result equal to 7.9 percent for his CAPM studies. (Woolridge at 70) From these results, Dr. Woolridge concludes that Gulf's cost of equity is in a range of 7.9 percent to 9.0 percent. Despite asserting that the CAPM results are within the appropriate cost of equity range, Dr. Woolridge specifically states that he gives primary weight to his DCF results to reach his final recommended equity cost rate range of 8.75 percent to 9.0 percent. Dr. Woolridge recommends the 8.875 percent midpoint of that range as the cost of equity for Gulf.

Q. Do you agree with Dr. Woolridge's application of the CAPM?

A. No, I believe that his CAPM results are outside any reasonable estimate of Gulf Power's cost of equity, as Dr. Woolridge's own point estimate indicates.

Q. Why do you believe that the CAPM produces unreasonably low cost of equity results for electric utilities at this time?

A. I believe there are two reasons why the CAPM produces unreasonably low cost of equity results for electric utilities at this time. First, as a result of the economic crisis of recent years, the U.S. Treasury has kept interest rates on

Treasury securities unusually low as part of its effort to stimulate the economy. Economists are forecasting that interest rates on Treasury securities will increase significantly once the economy begins to recover. In addition, the average beta of utilities is currently approximately 0.70, and the CAPM tends to underestimate the cost of equity for companies whose equity beta is less than 1.0 and to overestimate the cost of equity for companies whose equity beta is greater than 1.0.

Q. Did you summarize in your direct testimony the evidence that the CAPM underestimates the required returns for securities or portfolios with betas less than 1.0 and overestimates required returns for securities or portfolios with betas greater than 1.0?

A. Yes. I summarized this evidence in my direct testimony on pages 45 – 48.

Q. What conclusions do you reach from your review of the literature on the CAPM to predict the relationship between risk and return in the marketplace?

A. I conclude that the financial literature strongly supports the proposition that the CAPM underestimates the cost of equity for companies such as public utilities with betas less than 1.0. Because the CAPM significantly underestimates the cost of equity for companies with betas less than 1.0, and both Dr. Woolridge's and my proxy company groups have an average beta that is significantly less than 1.0, I further conclude that the Commission should give little weight to the results of the application of an unadjusted CAPM at this time.

C. DR. WOOLRIDGE'S COMMENTS ON THE RELATIONSHIP BETWEEN UTILITIES' RATE OF RETURN ON EQUITY AND THEIR MARKET-TO-BOOK RATIOS

Q. Does Dr. Woolridge discuss the relationship between rates of return equity, the cost of equity, and market-to-book ratios in his testimony?

A. Yes. Dr. Woolridge asserts that a market-to-book ratio above 1.0 indicates that a company is earning more than its cost of equity:

> As such, the relationship between a firm's return on equity, cost of equity, and market-to-book ratio is relatively straightforward. A firm that earns a return on equity above its cost of equity will see its common stock sell at a price above its book value. Conversely, a firm that earns a return on equity below its cost of equity will see its common stock sell at a price below its book value. [Woolridge at 40]

Q. Dr. Woolridge reports the results of three regression analyses that he believes support his claim that: (1) companies with market-to-book ratios greater than 1.0 are earning more than their costs of equity; (2) companies with market-to-book ratios equal to 1.0 are earning their costs of equity; and (3) companies with market-to-book ratios less than 1.0 are earning less than their costs of equity. (Woolridge at 41) Does Dr. Woolridge's regression analysis for his electric utilities provide any support for this claim?

A. No. Dr. Woolridge claims that: (1) the cost of equity for electric utilities like Gulf is 8.875 percent; and (2) companies with ROEs less than the cost of equity will have market-to-book ratios less than 1.0. However, contrary to

Dr. Woolridge's hypothesis, the data in his work papers indicate that in Panel A in Exhibit JRW-6, there are thirteen electric utilities with expected ROEs less than 8.875 percent, and none of these utilities have market-to-book ratios less than 1.0. Similarly, for the natural gas companies shown in Panel B of Exhibit JRW-6, there are three natural gas utilities with expected ROEs less than 8.875 percent, and no company has a market-to-book ratio less than 1.0. With regard to the water utilities in Panel C of Exhibit JRW-6, there are two companies with expected ROEs less than 8.875 percent, and none of these companies has a market-to-book ratio less than 1.0. Thus, Dr. Woolridge's own data contradict his claim that companies earning less than their cost of equity will have market-to-book ratios of less than 1.0.

D. REBUTTAL OF DR. WOOLRIDGE'S COMMENTS ON VANDER WEIDE DIRECT TESTIMONY

Q. What issues does Dr. Woolridge have regarding your estimate of Gulf's cost of equity?

A. Dr. Woolridge disagrees with my: (1) quarterly DCF model; (2) reliance on analysts' growth forecasts; (3) risk premium estimates; (4) allowance for flotation costs; and (5) financial leverage adjustment. (Woolridge at 75)

1. Quarterly DCF Model

Q. What are Dr. Woolridge's criticisms of your DCF studies?

A. Dr. Woolridge claims that I should: (1) use the annual rather than the quarterly DCF model to estimate Gulf's cost of equity; (2) use a combination of historical and analysts' growth rates to estimate the growth component of

the DCF model; (3) make no allowance for flotation costs; and (4) make no adjustment for the difference between the financial risk reflected in my cost of equity estimate and the financial risk reflected in Gulf's rate making capital structure.

Q. What is the major difference between the quarterly DCF model which you use and the annual DCF model employed by Dr. Woolridge?

A. The major difference is that my quarterly DCF model is based on the realistic assumption that dividends are paid quarterly, while Dr. Woolridge's annual DCF model is based on the unrealistic assumption that dividends are paid once at the end of each year.

Q. Why do you use the quarterly rather than the annual DCF model to estimate Gulf's cost of equity?

A. As I discuss in my direct testimony, the DCF model assumes that a company's stock price is equal to the present discounted value of all expected future dividends. Because the companies in my proxy group all pay dividends quarterly, the current market price that investors are willing to pay reflects the expected quarterly receipt of dividends. Therefore, a quarterly DCF model must be used to estimate the cost of equity for these firms. The quarterly DCF model differs from the annual DCF model in that it expresses a company's price as the present discounted value of a quarterly stream of dividend payments. The annual DCF model is only a correct expression for the present discounted value of future dividends if dividends are paid once at the end of each year.

Q. Why does Dr. Woolridge disagree with your application of the quarterly DCF model?

A. Dr. Woolridge asserts that the quarterly DCF model is not required because: (1) 'the appropriate dividend yield adjustment for growth in the DCF model is the expected dividend for the next quarter multiplied by four;" (Woolridge at 77) and (2) "notion that an adjustment is required to reflect the quarterly timing issue is refuted in a study by Richard Bower of Dartmouth College." (Woolridge at 78)

Q. Do you agree with Dr. Woolridge's statement that "the appropriate dividend yield adjustment for growth in the DCF model is the expected dividend for the next quarter multiplied by four"?

A. No. Dr. Woolridge's assertion is undoubtedly incorrect because it ignores the time value of quarterly dividend payments over the course of a year, and he provides no justification for his assertion. In contrast, I explain in detail in Appendix 2 of my direct testimony the appropriate adjustment for the quarterly payment of dividends in the application of DCF model.

Q. Do you agree with Dr. Woolridge's assertion that Dr. Bower's study "refutes" the "notion that an adjustment is required to reflect the quarterly timing" of dividend payments in the DCF model?

A. No. Indeed, the Bower study in fact confirms the downward bias of the annual DCF model. However, Bower asserts that an annual DCF model is reasonable because utilities "survive," even without adjusting for the quarterly payment of dividends.

Q. Is Bower's statement in favor of an annual DCF model a reasonable justification for using the annual DCF model in this proceeding?

A. No. Bower's assertion that "too many utilities have survived and sustained market prices above book" provides no financial or statistical refutation of the downward bias to the annual DCF model. As shown in Appendix 2 of Exhibit JVW-2 to my direct testimony, there can be no doubt that when dividends are paid quarterly, the quarterly DCF model must be used to estimate the cost of equity.

Q. Do you agree with Dr. Woolridge's assertion that the quarterly DCF model allows investors to earn more than their required return on equity?

A. No. The quarterly DCF model does not allow investors to earn more than their required return on equity; it simply offers a better estimate of investors' required return on equity than an annual DCF model. Whether a company earns more than its cost of equity depends on many factors, including the state of the economy and the demand for electricity, factors which cannot be known at the time the cost of equity is being estimated.

2. Analysts' Growth Forecasts

Q. Dr. Woolridge also criticizes your use of analysts' growth rates in your DCF model. Why do you use analysts' growth rates to estimate the growth component of the DCF model?

A. I use analysts' growth rates because my studies indicate that the analysts' growth rates are highly correlated with stock prices. This evidence provides strong support for the conclusion that investors use analysts' growth rates in

making stock buy and sell decisions, and thus the analysts' growth rates should be used to estimate the growth component of the DCF model.

Q. Does Dr. Woolridge agree with your statistical studies of the relationship between analysts' growth rates and stock prices?

A. No. Dr. Woolridge has four criticisms of my statistical studies of the relationship between analysts' growth rates and stock prices. First, he argues that my statistical study is outdated. Second, he argues that my study is misspecified because I used a "linear approximation" to the DCF model rather than a modified version of the DCF model. Third, he argues that I did not use both historical and analysts' forecasted growth rates in the same regression. Fourth, he argues that I did not perform any tests to determine if the difference between historic and projected growth measures is statistically significant. (Woolridge at 81 – 82)

Q. Do you agree with Dr. Woolridge's assertion that your statistical analysis of the relationship between analysts' growth rates and stock prices is outdated?

A. No. As discussed in my direct testimony, my study was updated by State Street Financial. The updated study continues to support the conclusion that the analysts' growth rates are more highly correlated with stock prices than historical measures such as those employed by Dr. Woolridge. Furthermore, Dr. Woolridge ignores other studies that have corroborated my results, and his own study does not support his criticism of the use of analysts' forecasts in applying the DCF model.

Q. Do you agree with Dr. Woolridge's criticism that your DCF model is misspecified because you used a "linear approximation" to the DCF model rather than a modified version of the DCF model?

A. No. Most regression analyses are based on the assumption that the relationship between the variables being studied is linear. As part of my studies, I tested whether the linear assumption was sufficiently close to provide reliable estimates of the model parameters. Applying a first order Taylor-series approximation to the DCF equation, I found that the first order, or linear, approximation was sufficiently close to the true equation to justify using linear regression analysis to study the relationship between price/earnings ratios and growth rates.

Q. Why did you not use a combination of historical and analysts' growth rates in the same regression?

A. I did not use a combination of historical and analysts' growth rates in the same regression because there are an infinite number of such combinations which could be tested. My studies indicate that the relationship between analysts' growth forecasts and stock prices is so strong compared to the relationship between historical growth rates and stock prices that there would be little advantage to combining historical growth rates with analysts' forecasts to predict stock prices.

Q. Is there a statistically significant difference between historical and projected growth measures in explaining stock prices in your statistical study?

A. Yes. The difference in performance of historical and projected growth rates is both statistically significant and dramatic.

Q. Dr. Woolridge claims in his testimony, “it is well known that the long-term EPS growth rate forecasts of Wall Street securities analysts are overly optimistic and upwardly biased.” (Woolridge at 80) Is he correct?

A. No. Contrary to Dr. Woolridge’s claim, the academic literature presents compelling evidence that analysts’ EPS growth forecasts are unbiased—that is, neither optimistic nor pessimistic. I have reviewed nine articles that address whether analysts’ growth forecasts are overly optimistic. At least seven of the nine articles reviewed find no evidence that analysts’ growth forecasts are overly optimistic. Two find evidence of optimism in the early years of the study, but also conclude that optimism is not present in the later years of the study. In fact, one study finds that analysts’ forecasts for the S&P 500 are pessimistic for the last four years of the study. (See Table 1 below and Schedule 1 of Exhibit JVW-3.)

TABLE 1

ARTICLES THAT STUDY WHETHER ANALYSTS' FORECASTS ARE BIASED TOWARD OPTIMISM

Author (Date)	*Conclusion*
Crichfield, Dyckman, and Lakonishok (1978)	Unbiased
Elton, Gruber, and Gultekin (1984)	Unbiased
Givoly and Lakonishok (1984)	Unbiased
Brown (1997)	Declining optimism
Keane and Runkle (1998)	Unbiased
Abarbanell and Lehavy (2003)	Unbiased
Ciccone (2005)	Pessimistic
Clarke, Ferris, Jayaraman, and Lee (2006)	Unbiased
Yang and Mensah (2006)	Unbiased

Q. Does some of the later research explain why some earlier studies in the literature conclude that analysts' EPS growth forecasts are optimistic?

A. Yes. Articles by Abarbanell and Lehavy (2003) and Keane and Runkle (1998) recognize that the results of earlier studies are heavily influenced by: (1) the inclusion of large unexpected accounting write-offs and special accounting charges in reported earnings; and (2) the impact of high correlation in analysts' forecasts. These articles conclude that once the statistical problems associated with the inclusion of non-recurring earnings in reported earnings per share and correlations in analysts' forecasts are corrected, the evidence supports the conclusion that analysts' forecasts are unbiased, and hence, not optimistic.

Q. Dr. Woolridge discusses the results of his study of the relationship between analysts' forecasts for utilities and the utilities' subsequent achieved earnings growth rates. Do you have any comments on his study?

A. Yes. First, Dr. Woolridge has misspecified the time frame of his analysts' earnings growth forecasts. In his study, Dr. Woolridge claims that he compares the analysts' forecast made in a particular quarter to the company's realized earnings growth rate in the *same* quarter four years hence. In making this comparison, Dr. Woolridge fails to recognize that: (1) the time frame of the analysts' growth forecast is an indefinite, long-run period that may differ from one analyst to another; (2) quarterly realized earnings are unaudited; and (3) quarterly realized earnings are subject to seasonality. Dr. Woolridge has provided no evidence that analysts' growth estimates were intended to forecast actual results for exactly the same quarter four years hence.

Second, Dr. Woolridge has not distinguished between recurring and non-recurring earnings. The analysts' growth forecasts are intended to be applied only to growth in recurring earnings, meaning that they are forecasts of earnings in the absence of extraordinary events and one-time write-offs. It is likely that the forecast deviations in Dr. Woolridge's sample are due primarily to the impact of extraordinary events and one-time write-offs rather than to problems with the analysts' forecasts of recurring earnings.

Third, Dr. Woolridge fails to adjust for the extremely high correlation in analysts' forecasts across companies. Financial researchers have

conclusively demonstrated that there is no evidence of analysts' optimism in data sets that are properly adjusted for the impact of one-time accounting write-offs and the correlation in analysts' forecasts across companies. (*See* Jeffery Abarbanell and Reuven Lehavy, "Biased Forecasts or Biased Earnings? The Role of Reported Earnings in Explaining Apparent Bias and Over/underreaction in Analysts' Earnings Forecasts," *Journal of Accounting and Economics,* 36 (2003) 105 – 146; Stephen J. Ciccone, "Trends in Analyst Earnings Forecast Properties," *International Review of Financial Analysis*, 14 (2005) 1 – 22)

Q. Why do analysts exclude non-recurring earnings from earnings growth forecasts?

A. Analysts exclude non-recurring earnings from earnings growth forecasts because stock prices reflect the impact of expected future earnings and, by definition, non-recurring earnings or losses are not expected to continue in the future. Because non-recurring earnings do not, in theory, impact stock prices, analysts do not include them in their earnings growth forecasts. In addition, because accounting adjustments are somewhat discretionary, it is virtually impossible to forecast the timing and magnitude of such adjustments, certainly when the long-term earnings per share forecast is intended to apply to a period three to five years in the future.

Q. Do you have evidence that non-recurring items can have a significant impact on the reported earnings per share for electric utilities?

A. Yes. The impact of non-recurring items on reported earnings per share for electric utilities can be estimated from annual data on aggregate earnings per share for electric utilities, including and excluding non-recurring items, published by The Edison Electric Institute in its annual financial report on investor-owned electric utilities. As shown in Table 2 below, aggregate EPS including non-recurring items (that is, EPS as reported) is generally less than aggregate EPS excluding non-recurring items; and, in many years, the difference is substantial. Thus, Dr. Woolridge's use of EPS data that include non-recurring items would have had a significant impact on his conclusion that analysts' forecasts are optimistic.

TABLE 2

EARNINGS PER SHARE ("EPS") INCLUDING AND EXCLUDING NON-RECURRING ITEMS

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

1992 - 2007

Year	EPS Include Non -Recurring	EPS Exclude Non-Recurring	Difference (Exclude-Include)
1992	1.66	1.85	0.19
1993	1.65	1.99	0.34
1994	1.92	1.96	0.04
1995	2.10	2.11	0.01
1996	2.14	2.21	0.07
1997	1.49	2.01	0.52
1998	1.52	1.79	0.27
1999	2.04	2.05	0.01
2000	1.59	2.47	0.88
2001	2.43	2.93	0.50
2002	-0.04	2.40	2.44
2003	1.45	2.20	0.75
2004	2.23	2.00	-0.23
2005	2.09	2.28	0.19
2006	2.42	2.37	-0.05
2007	2.65	2.34	-0.31

3. Risk Premium

Q. What is the risk premium approach to estimating the cost of equity?

A. The risk premium approach is based on the principle that investors expect to earn a return on an equity investment in Gulf that reflects a “premium” over and above the return they expect to earn on an investment in a portfolio of long-term bonds. This equity risk premium compensates equity investors for the additional risk they bear in making equity investments versus bond investments. Using the risk premium approach, the cost of equity is given by the following equation: cost of equity = interest rate plus risk premium.

Q. How do you estimate the interest rate component of the risk premium approach?

A. I estimate the interest rate component of the risk premium approach using the yield to maturity on A-rated utility bonds.

Q. Does Dr. Woolridge have any criticisms of your use of the yield to maturity on A-rated utility bonds to estimate the interest rate component of the risk premium approach?

A. Yes. Dr. Woolridge argues that my use of the yield to maturity on A-rated utility bonds inflates the required return on equity because long-term utility bonds are not risk free, that is, they are subject to both interest rate risk and credit risk. (Woolridge at 86 – 87)

Q. Do you agree with Dr. Woolridge's criticism of your use of the yield to maturity on A-rated utility bonds to estimate the interest rate component of the risk premium approach?

A. No. Dr. Woolridge fails to recognize that the risk premium approach does not require that the interest rate be "risk free." Indeed, the only requirement of the risk premium approach is that the same interest rate be used to estimate the interest rate component as is used to estimate the risk premium component. Because the risk premium approach suggests that the cost of equity equals (the interest rate) plus (the required return on equity minus the interest rate), the cost of equity should be approximately the same in a risk premium analysis, no matter what interest rate is used as the benchmark interest rate. Thus, use of the interest rate on A-rated utility bonds in a risk premium analysis will produce a higher interest rate component than use of a government bond interest rate, but this difference will be offset by the correspondingly lower risk premium. The lower risk premium arises because the difference between the return on equity and yield on A-rated utility bonds is less than the difference between the return on equity and the yield on long-term government bonds.

Q. Why do you use the yield on A-rated utility bonds rather than the yield on Treasury bonds in your risk premium studies?

A. I use the yield on A-rated utility bonds rather than the yield on Treasury bonds in my risk premium studies because I believe that utility bond yields are better indicators of a utility's cost of equity than Treasury bond yields. First, because the U.S. dollar is the major currency for international trade,

foreign governments tend to hold their currency reserves in U.S. Treasury bonds. Thus, Treasury bond yields are highly sensitive to changes in international economic conditions, whereas the U.S. utilities' cost of equity is not.

Second, because U.S. Treasuries are considered to be the safest investment in the world, investors across the world tend to flock to investments in U.S. Treasuries at times of widespread global economic turmoil. In periods of turmoil, the required return on risky investments such as utility bonds and stocks increases while the yield on U.S. Treasury bonds declines. Thus, changes to U.S. Treasury bond yields are poor indicators of changes in a utility's cost of equity.

Third, yields on U.S. Treasury bonds are highly sensitive to efforts by the Federal Reserve to stimulate the economy. Although most Federal Reserve monetary policy operations are conducted using short-term U. S. Treasury bills, yields on long-term Treasury bonds frequently move in the same direction as yields on short-term Treasury bills

Fourth, to the extent that there are economic developments that are specific to the utility industry, such as changes in environmental regulations and energy policy, such factors will be reflected both in utility bond yields and the utility cost of equity, but not in U.S. Treasury bond yields. Thus, that utility bond yields reflect utility-specific risks is an argument for—not an argument against—the use of utility bond yields to indicate changes in the utility cost of equity.

Q. How do you estimate the risk premium component of the risk premium approach?

A. I estimate the risk premium component of the risk premium approach in two ways. First, I estimate the difference between the DCF cost of equity for a proxy group of companies over the previous 199 months and the concurrent yield to maturity on A-rated utility bonds in those months, and then adjust the average risk premium to account for changes in interest rates. This estimate is my “ex ante risk premium approach.” Second, I estimate the risk premium from an historical study of stock and bond returns over the period 1937 to the present. This second risk premium approach is my “ex post risk premium approach.”

Q. Why does Dr. Woolridge criticize your ex ante risk premium approach?

A. Dr. Woolridge criticizes my ex ante risk premium approach because it relies on analysts’ forecasts to estimate the required return on equity using the DCF model.

Q. Have you addressed Dr. Woolridge’s criticisms of your use of analysts’ growth forecasts elsewhere in this rebuttal testimony?

A. Yes, I have. (See Section II, D., 2, above.)

Q. Does Dr. Woolridge agree with your use of historical stock and bond returns to estimate the equity risk premium?

A. No. Dr. Woolridge states:

> Among the errors are the US stock market survivorship bias (the "Peso Problem"), the company survivorship bias (only successful companies survive), the measurement of central tendency (arithmetic versus geometric mean), the historical time horizon used, the change in risk and required return over time, the downward bias in historical bond returns, and unattainable return bias. (Woolridge at 89)

Q. Do you agree with Dr. Woolridge's statement that historical bond returns are biased downward?

A. No. Because of capital gains and losses, historical bond returns may be higher or lower than what investors expected at the time they purchased the bonds. During the period since 1982, for example, historical bond returns have been biased upward as a measure of expectancy because of the large capital gains achieved by bondholders over this period. However, over the entire period considered in my ex post risk premium study (from 1937 to the present), capital gains and losses on bonds have approximately offset each other, and consequently there is no significant bias as a result from either capital gains or losses.

Q. What is the difference between an arithmetic and a geometric mean return?

A. An arithmetic mean return is an additive return that is calculated by summing the achieved return in each time period and dividing the total by the number of periods. In contrast, the geometric mean return is a multiplicative return that is calculated in two steps. First, one calculates the product of (1 plus the return) in each period of the study. Second, one calculates the n^{th} root of this product and subtracts 1 from the result. Thus, if there are two periods, and r_1 and r_2 are the returns in periods one and two, respectively, the arithmetic mean is calculated from the equation: $a_m = (r_1 + r_2) \div 2$. The geometric mean is calculated from the equation,

$$a_g = [(1 + r_1) \times (1 + r_2)]^{.5} - 1.$$

Q. Please describe Dr. Woolridge's concern regarding the use of arithmetic versus geometric mean returns.

A. Dr. Woolridge believes that my ex post risk premium study is biased because I calculate the expected risk premium using the arithmetic mean of past returns, whereas he believes I should have calculated the expected risk premium using the geometric mean of past returns.

Q. Is Dr. Woolridge's criticism valid?

A. No. As explained in Ibbotson® SBBI® Valuation Edition 2013 Yearbook (SBBI®), the arithmetic mean return is the best approach for calculating the return investors expect to receive in the future:

> The equity risk premium data presented in this book are arithmetic average risk premia as opposed to geometric

> average risk premia. The arithmetic average equity risk premium can be demonstrated to be most appropriate when discounting future cash flows. For use as the expected equity risk premium in either the CAPM or the building block approach, the arithmetic mean or the simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. This is because both the CAPM and the building block approach are additive models, in which the cost of capital is the sum of its parts. The geometric average is more appropriate for reporting past performance, since it represents the compound average return. [SBBI® at 56]

A discussion of the importance of using arithmetic mean returns in the context of CAPM or risk premium studies is contained in my direct testimony, Schedule 5 of Exhibit JVW-1, "Using the Arithmetic Mean to Estimate the Cost of Equity Capital."

Q. Dr. Woolridge also criticizes your ex post risk premium study because it is based on unattainable and biased historic stock returns. (Woolridge at 89) Is his criticism valid?

A. No. Dr. Woolridge bases his allegation on the assumption that stock index returns such as those reported by Ibbotson® SBBI® are "unattainable to investors." Dr. Woolridge's assumption is false: investors, in fact, can attain the returns achieved by stock indices simply by purchasing the stock index.

Q. Do you agree with Dr. Woolridge's criticism that your ex post risk premium study is characterized by "survivorship bias"? (Woolridge at 89)

A. No. Survivorship bias refers to problems that might arise when data for companies that have failed are excluded from the sample. However, with regard to the U.S. markets that I study, survivorship bias is not a major issue. First, over the period 1937 to the present, there have been relatively few companies in the S&P 500 and the S&P Utilities that have failed. Second, the S&P 500 includes the return on a stock until the day it is dropped from the index, and the effect of a company being dropped from the S&P 500 is generally anticipated by the market well in advance of the delisting. Thus, survivorship is not a material issue with respect to U.S. stocks.

Q. What does Dr. Woolridge mean when he refers to the "peso problem"? (Woolridge at 89)

A. Dr. Woolridge uses the term "peso problem" to refer to the fact that U.S. investors have earned higher returns on stock investments than investors in other countries because the U.S. economy has not suffered many of the same economic calamities as the economies of other countries. This criticism of the use of U. S. stock returns in risk premium studies might be appropriate if one were attempting to estimate the expected rates of return on non-U. S. stocks. However, for U. S. stocks, because there is no indication that the U. S. will suffer the economic calamities of other countries, such as hyper-inflation or military invasion, there is no reason why the returns on U. S. stocks would be biased upward.

Q. Dr. Woolridge asserts that your risk premium estimate is unreasonable because it is higher than the risk premium estimate found in the Graham/Harvey survey of Chief Financial Officers in December 2016 and the Fernandez surveys of financial analysts. (Woolridge at 97) Do you agree that surveys of financial managers provide useful information on the expected market risk premium?

A. No. Surveys of business managers provide little or no information on the expected market risk premium because: (1) managers have no incentive to take the survey seriously; (2) their responses are not typically based on market transactions or actual investment decisions; (3) their responses may reflect what they think the investigator wants to hear; and (4) the response rate is frequently low. In addition, Dr. Woolridge fails to recognize that Graham and Harvey comment that their survey responders frequently use hurdle rates for making investment decisions that exceed their estimates of excess returns on the S&P 500. (Graham and Harvey confirm that CEO responses to their survey are not typically based on market transactions or actual investment decisions when they state, “Often their [the CFO’s] 10-year risk premium is supplemented so that the company’s hurdle rate exceeds their expected excess return on the S&P 500.” (John Graham and Campbell Harvey, “The Long-Run Equity Risk Premium,” Sep. 9, 2005, p. 6)

4. Flotation Costs

Q. Why do you include an adjustment for flotation costs in your DCF analysis?

A. I include an adjustment for flotation costs because, without such an adjustment, Gulf would not be able to recover all the costs it incurs to finance its investments in electric plant and equipment.

Q. Does Gulf issue equity in the capital markets?

A. No. Although Gulf does not issue equity in the capital markets, its parent must issue equity to provide Gulf the necessary financing to make investments in its electric utility operations in Florida. If the parent is not able to recover its flotation costs through Gulf's rates, it will not be able to recover the full cost of issuing equity required to invest in Gulf.

Q. Does Dr. Woolridge agree with your flotation cost adjustment?

A. No. Dr. Woolridge claims that a flotation cost adjustment is inappropriate because: (1) the company has not presented any evidence that it actually incurs flotation costs when it issues new equity; and (2) it is frequently asserted that a flotation cost adjustment is required to prevent dilution of the company's existing shareholders, but existing shareholders cannot suffer dilution as long as the company's stock price is above book value.

Q. Do you agree with Dr. Woolridge's assertion that the company did not provide any evidence that it incurs flotation costs when it issues new equity?

A. No. In Appendix 3 of Exhibit JVW-1 to my direct testimony, I present evidence that all companies incur flotation costs when they issue new equity

securities, that flotation costs represent approximately five percent of the company's pre-issue stock price, and that the company will not be able to earn a fair rate of return on its investment if it does not recover its flotation costs.

Q. Do you justify flotation costs on the grounds that flotation costs are required to prevent dilution of existing shareholders?

A. No. I justify flotation costs on the grounds that the company will not be able to earn a fair rate of return if it does not recover the flotation costs it incurs when it issues new equity. My flotation cost adjustment is completely unrelated to the company's market-to-book ratio.

Q. Has the Commission previously accepted a flotation cost allowance for Florida utilities?

A. Yes. For example, the Commission included an adjustment for flotation costs in its 2009 TECO Order. The Commission states, "We have traditionally recognized a reasonable adjustment for flotation costs in the determination of the investor-required ROE. … such adjustments have typically been on the order of 25 to 50 basis points." (Order No. PSC-09-0283-FOF-EI, Docket No. 080317-EI, April 30, 2009, at 44) In addition, I note that this Commission typically uses a flotation cost allowance of four percent in both DCF and CAPM models to estimate the cost of equity for water utilities in Florida. (See Order No. PSC-16-0254-PAA-WS, issued June 29, 2016 in Docket No. 160006-WS, regarding the annual

reestablishment of authorized range of return on common equity for water and wastewater utilities.)

5. Financial Risk Adjustment

Q. How do financial market participants measure risk?

A. Under the assumption that the probability distribution of returns is symmetric, *i.e.*, centered on the mean return, financial market participants generally measure risk by the forward-looking variance of return on investment.

Q. Does the forward-looking variance of an investor's return on a stock investment in a company depend on the company's capital structure?

A. Yes. The forward-looking variance of an investor's return depends on the company's debt to equity ratio, where both debt and equity are measured in terms of market values, not book values.

Q. What is the meaning of the term, "financial risk"?

A. Economists use the term, "financial risk" to refer to the contribution of the firm's capital structure, *i.e.*, its debt to equity ratio, to the forward-looking variance of return on the firm's stock.

Q. Does financial risk reflect the market values of debt and equity in a company's capital structure or the book values of debt and equity in a company's capital structure?

A. Financial risk measures the contribution of the company's capital structure to the forward-looking variance of return on the company's stock, and the forward-looking variance depends on the market values of debt and equity in the company's capital structure, not the book values. (*See,* for example*,* Richard A. Brealey, Stewart C. Myers, and Franklin Allen, Principles of Corporate Finance, 8th ed., McGraw-Hill, 2006, pp. 452 - 456) Thus, financial risk reflects the market values of debt and equity in a company's capital structure, not the book values.

Q. Is Gulf recommending that its weighted average cost of capital in this proceeding be calculated based on the market values of debt and equity in its capital structure?

A. No. Consistent with previous regulatory practice, Gulf is recommending that its weighted average cost of capital be based on the book values of debt and equity in its capital structure.

Q. Is the financial risk associated with Gulf's recommended capital structure measured in the same way as the financial risk associated with the capital structures of your proxy companies?

A. No. The financial risk of my proxy companies is reflected in their market value capital structures, while Gulf is recommending that a book value capital structure be used for the purpose of setting rates. Thus, the financial risk of my proxy companies is measured by their market value capital structures, while Gulf's financial risk is measured by its book value capital structure.

Q. How do you adjust your cost of equity results for your comparable companies to reflect the difference between the market's perception of the financial risk of your proxy companies and the financial risk reflected in Gulf's recommended capital structure?

A. As described in my direct testimony (see pp. 51 – 52), I adjust the cost of equity results for my comparable companies by equating the after-tax weighted average cost of capital of my proxy companies to the after-tax weighted average cost of capital of Gulf. In this procedure, I use market-value capital structure weights for my comparable companies because the cost of capital for these companies is based on market values, and I use book value weights for Gulf because the recommended cost of capital for Gulf in this proceeding is based on book values.

Q. Does Dr. Woolridge agree with your financial risk adjustment?

A. No. Dr. Woolridge claims that my financial risk adjustment is unjustified because: (1) a market-to-book ratio above 1.0 indicates that a company is earning more than its cost of equity; (2) there is no change in the company's leverage; (3) financial publications report capital structures based on book values; (4) no other commissions have accepted using a market value capital structure to calculate the allowed rate of return; (5) Gulf's common equity ratio is in line with the common equity ratios of other utilities; and (6) Gulf's bond ratings suggest that Gulf's investor risk is at or lower than that of other electric utilities. (Woolridge at 69 – 70)

Q. Do you agree that a market-to-book ratio greater than 1.0 indicates that a company is earning more than its cost of equity?

A. No. As discussed above, Dr. Woolridge's own study, based on October 2016 data, demonstrates that many electric, natural gas, and water utilities have estimated ROEs less than 8.875 percent but also have market-to-book ratios greater than 1.0. Dr. Woolridge's data clearly contradict his claim that a company's market-to-book ratio is an indicator of whether a company is earning more than its cost of equity.

Q. Does your financial risk adjustment assume a "change" in a company's leverage?

A. No. As discussed above, my financial risk adjustment reflects the difference in the financial risk between the capital structures of the proxy companies and the company's ratemaking capital structure. It is unclear what Dr. Woolridge refers to when he notes a "change" in capital structure.

Q. Does the observation that financial publications report capitalization on a book value basis undermine the validity of your financial risk adjustment?

A. No. The validity of my financial risk adjustment is based on the widely-recognized observation that the equity investor measures financial risk by the variance of portfolio return; and the variance of an investor's portfolio return depends on the *market values* of the securities in the portfolio, not on the *book values* of the securities in the portfolio. The truth of the statement that variance of return depends on market values is recognized both in academia and the marketplace. In addition, investors have no difficulty in

calculating market value capital structures from publicly available information.

Q. Dr. Woolridge claims that in response to OPC interrogatory No. 69, you state that you "could not identify any proceeding" in which you have testified "where the regulatory commission had adopted" your "leverage adjustment." (Woolridge at 98 – 99) Does Dr. Woolridge correctly characterize your response?

A. No. I stated that I do not maintain records of regulatory decisions or a list of all cases in which commissions have accepted my recommendations. However, I noted that I was generally aware that financial adjustments similar to that which I propose have been adopted in Pennsylvania and Canada, and that many states use market value capital structures to determine utility property taxes.

Furthermore, I am also aware that market value capital structures have been used to set allowed rates of return in numerous telecommunications cases in which I have participated since 1996, including the *Virginia Arbitration Proceeding* in which my 12.95 percent overall cost of capital recommendation was accepted, and a Michigan docket in which my 75 percent equity market value capital structure recommendation was accepted. (Memorandum Opinion and Order*, Petition of AT&T Communications of Virginia Inc., Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia Corporation Commission Regarding Interconnection Disputes With Verizon*

Virginia Inc., 18 FCC Rcd 17722 ¶ 94 (2003) (**"***Virginia Arbitration Order***"**) In this proceeding, the Wireline Competition Bureau of the FCC, accepting Verizon's proposal, finds that the appropriate capital structure component of the weighted average cost of capital should be based on the market values of debt and equity, stating, "we give no weight to the portion of AT&T/WorldCom's proposal that is based on incumbent LECs' book value capital structure." *See* Order at ¶¶ 103-104. See also, Michigan Public Service Commission Order, *In the matter, on the Commission's own motion, to review the total element long run incremental costs and the total service long run incremental costs for Verizon North Inc., and Contel of the South, Inc., D/B/A Verizon North Systems, to provide telecommunications services*, Case No. U-15210, March 18, 2009. "The Commission is not persuaded that Verizon's capital structure should be based on book value. The Commission agrees with the Staff and adopts Verizon's proposed capital structure of 75 percent equity and 25 percent debt." (Order at 17)

Q. Dr. Woolridge claims that investment risk is measured by bond ratings, and Gulf's bond rating indicates that "Gulf's investor risk is below that of the proxy groups." (Woolridge at 31) Does a bond rating measure investment risk from the point of view of an equity investor?

A. No. Bond ratings reflect investment risk only from the point of view of debt investors, not the point of view of equity investors.

Q. How does the debt investor's view of risk differ from the equity investor's view of risk?

A. The debt investor's view of risk differs from the equity investor's view of risk in that debt investors are senior to equity investors in the event of financial distress. That is, in the event of financial distress, debt investors are entitled to repayment of their investment before equity investors. Thus, debt investors are primarily concerned with the risk that a company will not be able to repay the interest and principal on its debt, whereas equity investors are primarily concerned with the forward-looking variance of return on the market value of their equity investment.

Q. Does the risk that a company will be unable to repay the interest and principal on its debt depend on the market values of the company's debt and equity or on the book values of the company's debt and equity?

A. Because the interest and principal on a company's debt is based on the book value of a company's debt, the probability of bankruptcy depends on the book value of a company's debt in relation to the book value of a company's equity; that is, the probability of bankruptcy depends on a company's book value capital structure rather than its market value capital structure.

Q. Does the forward-looking variance of return on an equity investment depend on the market values or the book values of a company's debt and equity?

A. The forward-looking variance of return on an equity investment depends on the market values of debt and equity—not the book values of debt and

equity—because equity investors can only purchase and sell equity at market values. Thus, from the equity investor's point of view, financial risk depends on a company's market value capital structure, not its book value capital structure.

Q. Does the difference between market and book value capital structures help to explain your financial risk adjustment?

A. Yes. As I discuss in my direct testimony, my financial risk adjustment is required because equity investors look at a company's market value capital structure to determine the financial risk of investing in the company's equity, whereas the rates in this proceeding are based on the company's book value capital structure. Because equity investors' views of financial risk as measured in the marketplace are reflected in my cost of equity estimate, but my cost of equity estimate is applied to a book value capital structure through the regulatory process, the equity investor is unlikely to have an opportunity to earn the required marketplace return without my financial risk adjustment.

III. REBUTTAL OF MR. GORMAN

Q. What is Mr. Gorman's recommended cost of equity for Gulf?

A. Mr. Gorman recommends a cost of equity for Gulf equal to 9.2 percent. (Gorman at 2)

Q. How does Mr. Gorman estimate Gulf's cost of equity?

A. Mr. Gorman estimates Gulf's cost of equity by applying several cost of equity methods to essentially the same comparable group of electric utilities that I use in my direct testimony. His cost of equity methods include: (1) the DCF model; (2) a risk premium method; and (3) a Capital Asset Pricing Model ("CAPM").

Q. What areas of Mr. Gorman's testimony will you address in your rebuttal testimony?

A. I will address Mr. Gorman's DCF analysis, risk premium analysis, CAPM analysis, and his comments on my direct testimony.

A. Mr. Gorman's DCF Model

Q. What DCF model does Mr. Gorman use to estimate Gulf's cost of equity?

A. Mr. Gorman uses an annual DCF model to estimate Gulf's cost of equity.

Q. Do you agree with Mr. Gorman's use of an annual DCF model to estimate Gulf's cost of equity?

A. No. As discussed in my rebuttal of Dr. Woolridge, the DCF model is based on the assumption that a company's stock price reflects the present value of the dividends investors expect to receive from their ownership of the stock. Because the companies in Mr. Gorman's analysis all pay dividends quarterly, these companies' stock prices reflect the present value of a quarterly stream of dividends. Hence, the quarterly DCF model is the only

DCF model that is consistent with the basic assumption that stock prices are equal to the expected present value of future dividends.

Q. Does Mr. Gorman present more than one DCF analysis for the Commission to consider?

A. Yes. Mr. Gorman presents three DCF analyses: (1) a constant growth DCF analysis based on analysts' growth rates; (2) a constant growth DCF analysis based on sustainable growth rates; and (3) a three-stage DCF analysis in which growth rates decline to an estimate of long-run Gross Domestic Product (GDP) growth in three stages.

Q. What DCF results does Mr. Gorman obtain from his constant growth DCF analysis based on analysts' growth rates?

A. Mr. Gorman obtains an average DCF result equal to 9.23 percent and a median DCF result equal to 9.30 percent. (Gorman at 34)

Q. Do you agree with Mr. Gorman's use of analysts' growth forecasts as a proxy for investors' growth expectations in his first DCF analysis?

A. Yes. Mr. Gorman's use of analysts' growth forecasts is consistent with the results of studies, including my own, that demonstrate that analysts' growth forecasts are more highly correlated with stock prices than are other growth forecasts, such as historical growth forecasts and sustainable growth forecasts.

Q. You note that Mr. Gorman conducts a second constant growth DCF analysis using “sustainable” growth rates. How does Mr. Gorman estimate the “sustainable” growth rate in his second constant growth DCF model?

A. Mr. Gorman estimates the sustainable growth rate in his second constant growth DCF analysis based on Value Line’s forecasts of each company’s retention ratio and earned ROE. (Gorman at 36)

Q. Do you agree with Mr. Gorman’s use of the “sustainable growth” method of estimating investors’ growth expectations?

A. No. I have two objections to Mr. Gorman’s use of the “sustainable growth” method of estimating investors’ growth expectations. First, the DCF model requires the growth forecasts of investors. My studies, along with those of others, provide strong evidence that analysts’ growth forecasts are a better proxy for investors’ growth expectations than the sustainable growth rate used by Mr. Gorman. Second, the sustainable growth method is logically circular in that each company’s rate of return on equity must be known in order to estimate the sustainable growth rate at the same time that the sustainable growth rate must be known to estimate the rate of return on equity through the DCF model. It is not possible for the rate of return on equity to be known before the sustainable growth rate and, at the same time, the sustainable growth rate to be known before the rate of return on equity.

Q. What DCF results does Mr. Gorman obtain from his sustainable growth DCF Model?

A. Mr. Gorman obtains an average DCF result of 8.38 percent and a median DCF result of 8.20 percent (Gorman at 36), results that are approximately 100 basis points lower than the results he obtains when he uses analysts' growth forecasts in his constant growth DCF analysis.

Q. What is the basic assumption of Mr. Gorman's three-stage DCF model?

A. Mr. Gorman's three-stage DCF model is based on the assumption that investors believe his proxy companies will grow at the average analyst growth rates for five years, decline to the long-run growth in the economy in years six through ten and, beginning in the eleventh year, grow at the rate of 4.25 percent forever. (Gorman at 41)

Q. What results does Mr. Gorman obtain from his three-stage DCF model?

A. Mr. Gorman obtains results of 8.18 percent and 8.05 percent from the application of his three-stage DCF model. (Gorman at 43)

Q. Does Mr. Gorman provide any evidence to support his basic assumption that utilities will grow at analysts' growth rates for the first five years, decline in growth for the next five years, and beginning in year eleven grow at the estimated GDP growth rate in perpetuity?

A. No. He simply assumes that rational investors would make this assumption.

Q. How does Mr. Gorman justify the results of his three-stage DCF model?

A. Mr. Gorman justifies the results of his three-stage model on the grounds that, in his opinion, analysts' growth rates generally exceed the projected growth of the economy, and companies cannot grow forever at a rate in excess of the expected growth of the economy.

Q. Mr. Gorman seems to believe that investors' growth expectations must be "rational." Are investors' growth expectations always "rational"?

A. No. In hindsight, most economists would agree that stock investors' growth expectations during the technology stock boom of the late 1990s and early 2000s, and real estate investors' growth expectations during the real estate boom of 2001 to 2007, were irrational. Yet, it was these "irrational" growth expectations that caused stock and real estate prices to rise by so much during those periods.

Q. Does the DCF Model only require the use of investors' growth expectations when investors' growth expectations are "rational"?

A. No. The DCF model requires the use of investors' growth expectations, whether rational or irrational.

Q. Is it appropriate for Mr. Gorman to adjust the growth term in his DCF model, without also adjusting the stock price term in his model?

A. No. If Mr. Gorman believes that investors' growth expectations are irrational, he should recognize that "irrational" growth expectations are likely to be accompanied by "irrational" stock prices. Indeed, as discussed above, both

growth expectations and stock prices were “irrational” during the stock market boom of the late 1990s and early 2000s. To be consistent in applying his own definition of “rational,” Mr. Gorman would need to adjust not only his growth estimates to reflect the long-run growth in the economy, but also his stock prices to reflect a “rational” estimate of the value of the company.

Q. Does Mr. Gorman’s opinion that a company cannot grow at a rate greater than the rate of growth in GDP forever imply that a single-stage DCF model cannot be used to estimate the cost of equity?

A. No. Mr. Gorman fails to recognize that the DCF model requires the growth expectations of investors, not the growth expectations of Mr. Gorman. If investors use analysts’ growth rates to value stocks in the marketplace, Mr. Gorman should use analysts’ growth rates to estimate the growth component of the DCF model. Mr. Gorman also fails to recognize that companies do not have to grow at the same rate forever for the single-stage DCF Model to be a reasonable approximation of how prices are determined in capital markets.

Q. Have you done any studies on the growth rates that investors use to value stocks in the marketplace?

A. Yes. As discussed in my direct testimony and above, my studies indicate that investors use analysts’ forecasted growth rates to value stocks in the marketplace.

Q. Does the opinion that a company cannot grow at a rate of growth greater than the growth in GDP forever imply that Mr. Gorman's assumption is correct that companies can only grow at rates faster than the economy for five years?

A. No. The opinion that a company's earnings cannot grow at a rate greater than the rate of growth in the GDP forever does not imply that companies can only grow faster than the rate of growth in the economy for five years. Mr. Gorman's assumption that companies must grow at the same rate as the economy after year five is completely arbitrary.

Q. Does Mr. Gorman include an allowance for flotation costs in his DCF analysis?

A. No.

Q. Do you agree with Mr. Gorman's failure to include flotation costs in his DCF analysis?

A. No. As discussed in my direct testimony, flotation costs are a cost of issuing securities that must be reflected in a cost of equity analysis for investors to earn a return that is commensurate with returns on other investments of the same risk.

B. Mr. Gorman's Risk Premium Model

Q. How does Mr. Gorman estimate the required risk premium for investing in his electric utility proxy group?

A. Mr. Gorman estimates the required risk premium for investing in his proxy electric utilities by comparing the average authorized electric utility rate of return on equity for each year from 1986 through September 2016 to both the average interest rate on long-term Treasury bonds and the average interest rate on A-rated utility bonds in each year. Mr. Gorman finds that the risk premium over the yield on long-term Treasury bonds falls in the range 4.25 percent to 6.75 percent, and the risk premium over the yield on A-rated utility bonds falls in the range 2.88 percent to 5.58 percent. Recognizing that allowed equity risk premiums have tended to increase as interest rates decline, Mr. Gorman applies a 0.75 weight to the high end of his risk premium ranges and a 0.25 weight to the low end of his risk premium ranges. Mr. Gorman thus concludes that the appropriate risk premium on an investment in utility stocks compared to long-term Treasury bonds is 6.13 percent, and the appropriate risk premium on an investment in utility stocks compared to A-rated utility bonds is 4.91 percent. (Gorman at 50)

Q. What risk premium cost of equity estimates does Mr. Gorman obtain from his analysis of the relationship between authorized allowed ROEs and the interest rates on Treasury bonds and utility bonds?

A. Adding his 6.13 percent risk premium over long-term Treasury bonds to his forecasted Treasury bond yield of 3.4 percent, Mr. Gorman obtains a risk premium cost of equity of 9.53 percent. Adding a 4.91 percent risk premium

over A-rated utility bonds to a 4.55 percent utility bond yield, Mr. Gorman obtains a risk premium cost of equity of 9.46 percent. Taking the midpoint of his 9.46 percent to 9.53 percent range, Mr. Gorman concludes that the risk premium cost of equity is 9.50 percent. (Gorman at 50)

Q. Do you agree with Mr. Gorman's method of estimating the required risk premium on electric utility stocks?

A. No. Although Mr. Gorman correctly recognizes that the required equity risk premium increases when interest rates decline, his method of estimating the relationship between the required equity risk premium and interest rates is not statistically rigorous.

Q. Have you studied the statistical relationship between the risk premiums implied by historical allowed rates of return on equity and the yields on long-term Treasury bonds and utility bonds over the period 1986 to the present reported by Mr. Gorman?

A. Yes. I perform a regression analysis of the relationship between the risk premium implied by the allowed rates of return on equity issued by regulatory commissions and the level of interest rates. In his risk premium analyses, Mr. Gorman examines historical data on the spreads between allowed ROEs, 30-year Treasury bond yields, and A-rated utility bond yields. Thus, I have performed statistical regression analyses of the relationship between the historical allowed equity risk premiums and 30-year Treasury bond yields, and A-rated utility bond yields.

Q. What does your statistical regression analysis of the relationship between historical allowed risk premiums and Treasury bond yields show?

A. The relationship between the risk premium implied by historical allowed ROEs and the yield on 30-year Treasury bonds is given by the following equation:

$RP_{AUTHORIZED}$	=	8.01 –	0.45 x T_B
t-statistic	=	(33.45)	(11.16)

where:

$RP_{AUTHORIZED}$	=	the risk premium implied by utility commission authorized rates of return on equity,
8.01 and 0.45	=	estimated regression coefficients with t-statistics shown in parentheses; and
T_B	=	the yield on long-term Treasury bonds.

Q. What is the meaning of the negative 0.45 coefficient on the Treasury bond variable?

A. The negative 0.45 coefficient on the Treasury bond variable indicates that the authorized risk premium increases by approximately forty-five basis points for every one hundred basis point decrease in interest rates.

Q. What is the meaning of the 11.16 t-statistic in the above equation?

A. The 11.16 t-statistic indicates that the strong negative relationship between the risk premium and the yield on 30-year Treasury bond is statistically significant.

Q. What risk premium do you obtain from your statistical analysis of the relationship between allowed rates of return and the interest rate on long-term Treasury bonds?

A. Using Mr. Gorman's forecasted 3.4 percent interest rate on long-term Treasury bonds, I obtain a risk premium of 6.5 percent over the forecasted yield to maturity on long-term Treasury bonds. This risk premium estimate is 110 basis points higher than the average 5.4 percent risk premium on U.S. Treasury bonds shown on Mr. Gorman's Exhibit MPG-13, page 1 of 1, and forty basis points higher than the 6.1 percent risk premium used by Mr. Gorman.

Q. Do these regression equations support the conclusion that the risk premium tends to increase when interest rates decline?

A. Yes. The negative coefficients associated with the interest rate variables, T_B and A_B, indicate that the risk premium moves in the opposite direction as interest rates, thus verifying the conclusion that the risk premium increases when interest rates decline.

Q. Have you also studied the relationship between the historical allowed equity risk premiums and the yield on utility bonds, as reported by Mr. Gorman?

A. Yes. Using the data found in Mr. Gorman's Exhibit MPG-14, the risk premium implied by historical allowed rates of return compared to the yield on utility bonds is given by the relationship:

$RP_{AUTHORIZED}$	=	7.29 –	0.45 x A_B
t-statistic	=	(27.15)	(12.34)

where:

$RP_{AUTHORIZED}$	=	the risk premium implied by utility commission authorized rates of return on equity,
7.29 and 0.45	=	estimated regression coefficients with t-statistics shown in parentheses; and
A_B	=	the yield on Moody's A-rated utility bonds.

Q. What is the meaning of the negative 0.45 coefficient on the A-utility bond yield variable?

A. The negative 0.45 coefficient on the A-utility bond yield variable indicates that the allowed equity risk premium increases by approximately 45 basis points for every one hundred basis point decrease in the yield on A-rated utility bonds.

Q. What is the meaning of the negative 12.34 t-statistic in the above equation?

A. The negative 12.34 t-statistic indicates that the strong negative relationship between the risk premium and utility bond yields is statistically significant.

Q. What risk premium do you obtain from your statistical analysis of the relationship between allowed rates of return and the interest rate on utility bonds?

A. Using Mr. Gorman's 4.55 percent interest rate on utility bonds, I obtain a risk premium of 5.23 percent. This risk premium estimate is one hundred twenty basis points higher than the average 4.0 percent risk premium shown on Mr.

Gorman's Exhibit MPG-14, page 1 of 1 and approximately thirty basis points higher than the 4.9 percent risk premium used by Mr. Gorman.

Q. Why are the estimated risk premiums from your regression analyses higher than the average risk premiums over the period 1986 through September 2016?

A. The risk premiums from my regression analyses are higher than the average risk premiums over the period of Mr. Gorman's studies because, as discussed above, risk premiums generally increase when interest rates decline, and interest rates have declined over the period of Mr. Gorman's studies. My regression analyses correctly take into account the inverse relationship between risk premiums and interest rates.

Q. What cost of equity estimates would Mr. Gorman have obtained from his risk premium analyses if he had correctly calculated the inverse relationship between allowed equity risk premiums and interest rates, as you have done in your regression analyses?

A. Adding the calculated risk premiums of 6.5 percent over Treasury bonds and 5.23 percent over utility bonds to Mr. Gorman's forecasted 3.4 percent yield on long-term Treasury bonds and his 4.55 percent utility bond yield produces an average risk premium cost of equity estimate equal to 9.84 percent (the average of 9.9 percent and 9.78 percent). This cost of equity estimate is 60 basis points higher than Mr. Gorman's recommended 9.2 percent cost of equity and 30 basis points higher than his reported 9.5 percent risk premium cost of equity estimate.

C. Mr. Gorman's CAPM

Q. The CAPM requires estimates of the risk-free rate, the company-specific risk factor, or beta, and either the required return on an investment in the market portfolio, or the risk premium on the market portfolio compared to an investment in risk-free government securities. How does Mr. Gorman estimate these CAPM inputs?

A. For the risk-free rate, Mr. Gorman uses a 3.4 percent forecasted yield on long-term Treasury bonds. For the company-specific risk factor or beta, Mr. Gorman uses the average 0.70 Value Line beta for his proxy companies. For his estimate of the expected risk premium on the market portfolio, Mr. Gorman uses both a forward-looking risk premium estimate equal to 7.8 percent and an historical risk premium estimate equal to 6.0 percent. (Gorman at 52 - 53)

Q. How does Mr. Gorman arrive at his 7.8 percent and 6.0 percent estimates of the market risk premium?

A. Mr. Gorman derives his forward-looking risk premium estimate (7.8 percent) from the difference between an expected market return (11.2 percent) and a risk-free rate (3.4 percent). Mr. Gorman derives his historical risk premium estimate (6 percent) from the 6 percent difference between the historical arithmetic average of achieved total return on the S&P 500 (12 percent) and the total return on long-term Treasury bonds (6 percent). (Gorman at 54)

Q. What CAPM cost of equity estimate does Mr. Gorman obtain from his CAPM analyses?

A. Mr. Gorman obtains a high CAPM estimate of 8.8 percent (8.8 = 3.4 + .70 x 7.8) and a low CAPM estimate of 7.57 percent (7.57 = 3.4 + .70 x 6). (Gorman at 56)

Q. Do you agree with Mr. Gorman's CAPM analysis of the cost of equity?

A. No. I disagree with Mr. Gorman's estimate of the risk-free rate and his failure to acknowledge the substantial evidence that the CAPM tends to underestimate the cost of equity for companies such as his comparable companies with betas less than 1.0.

Q. Why do you disagree with Mr. Gorman's 3.4 percent estimate of the risk-free rate?

A. I disagree with Mr. Gorman's 3.4 percent estimate of the risk-free rate because the analysis presented in my direct testimony indicates that the forecasted yield on long-term Treasury bonds is approximately 4.2 percent.

Q. You note that Mr. Gorman uses a beta equal to 0.70. Does Mr. Gorman acknowledge the evidence that the CAPM tends to underestimate the cost of equity for companies, such as his proxy companies, that have betas less than 1.0?

A. No.

Q. Did you cite evidence that the CAPM tends to underestimate the cost of equity in your direct testimony and in your rebuttal of Dr. Woolridge?

A. Yes. I cited this evidence in my direct testimony and in my rebuttal of Dr. Woolridge above. (Vander Weide Direct at 45 – 48)

Q. In your direct testimony, did you provide evidence that the CAPM underestimates the cost of equity for companies, such as the proxy electric utilities, that have betas less than 1.0?

A. Yes. I present such evidence in my direct testimony. (Vander Weide Direct at 48 and Schedule 7) My comparison of the earned risk premiums on investments in utility stocks and investments in the S&P 500 over the period 1937 to 2016 indicates that the historical ratio of the utility risk premium to the S&P 500 risk premium is 0.90. Thus, the use of a 0.70 measured utility beta in the CAPM underestimates the cost of equity for electric utilities at this time.

D. Response to Mr. Gorman's Comments on Dr. Vander Weide's Testimony

Q. Does Mr. Gorman agree with your cost of equity estimate for Gulf?

A. Mr. Gorman disagrees with my: (1) financial risk adjustment (Gorman at 63 – 66); (2) DCF analysis (Gorman at 66 – 68); (3) risk premium analysis (Gorman at 54 – 57); and (4) flotation cost adjustment. (Gorman at 68 – 70)

1. Financial Risk Adjustment

Q. Why do you adjust the cost of equity results for your proxy companies to reflect the average difference between the financial risk of your proxy companies and the financial risk reflected in Gulf's recommended capital structure?

A. I adjust my cost of equity results because they reflect a higher degree of financial risk than Gulf's recommended capital structure. In making this assessment, I recognize that investors measure the financial risk of investing in the equity of my proxy companies based on these companies' market value capital structures, while Gulf is recommending a book value capital structure. Since investors demand a higher return for bearing greater risk, an adjustment is required to the cost of equity result for the proxy companies. (Vander Weide Direct at 50 – 52)

Q. You note that "investors measure the financial risk of investing in the equity of my proxy companies based on these companies' market value capital structures." Why do equity investors measure the financial risk of your proxy companies based on their market value capital structures?

A. Equity investors measure financial risk based on market value capital structures because, from the equity investor's point of view, risk is measured by the forward-looking variance of return on investment; and the variance of return on investment depends on a company's market value capitalization, not its book value capitalization.

Q. How does Mr. Gorman define financial risk?

A. Mr. Gorman defines financial risk as the ability of a company to meet its financial obligation to pay the interest and principal on its debt. (See, for example, Gorman at 25 – 26.)

Q. Does Mr. Gorman's definition of financial risk reflect the point of view of equity investors?

A. No. Mr. Gorman's definition of financial risk reflects the point of view of debt investors, not the point of view of equity investors. Whereas debt investors are justifiably concerned with a company's ability to cover the interest and principal payments on its debt, equity investors are primarily concerned with the forward-looking variance of return on their investment. As noted above, the forward-looking variance of return on investment depends on a company's market value capital structure, not its book value capital structure. Indeed, equity investors generally cannot buy a company's stock at book value.

Q. In summary, do you agree with Mr. Gorman's criticism of your financial risk adjustment?

A. No. Mr. Gorman fails to recognize that equity investors measure financial risk by the forward-looking variance of return on their equity investment in the company, and the forward-looking variance of return on an equity investment in a company reflects the company's market value capital structure. Mr. Gorman's criticism of my financial risk adjustment depends on his incorrect assertion that financial risk reflects book value capitalization

ratios rather than market value capitalization ratios. While his assertion may be correct from the bond investor's point of view, it is certainly not correct from the equity investor's point of view. The equity investor's point of view is the only point of view that is relevant for determining the cost of equity.

2. DCF Analysis

Q. What issues does Mr. Gorman have with regard to your DCF analysis?

A. Mr. Gorman addresses my: (1) use of a quarterly DCF model; (2) flotation cost adjustment; and (3) reliance on analysts' growth forecasts.

Q. Why does Mr. Gorman disagree with your use of a quarterly DCF model?

A. Mr. Gorman claims that my use of a quarterly DCF model is inappropriate because "the compounded return associated with quarterly dividends is not a cost to the utility." (Gorman at 67)

Q. Do you agree with Mr. Gorman's claim that "the compounded return associated with quarterly dividends is not a cost to the utility"?

A. No. The compounded return associated with quarterly dividends is the cost to the company of paying *quarterly* dividends rather than an *annual* dividend at the end of the year. Paying quarterly dividends is a cost to the company because the company must finance the quarterly dividend payments sooner rather than later. Thus, the cost of the quarterly dividend payments is the time value of money. Mr. Gorman fails to understand that the time value of money reflects a cost to the utility.

Q. Are Mr. Gorman's concerns with your use of analysts' forecasts and a flotation cost adjustment similar to the concerns expressed by Dr. Woolridge?

A. Yes, they are.

Q. Have you responded to these concerns in your rebuttal of Dr. Woolridge?

A. Yes, I have.

3. Risk Premium Analysis

Q. What issue does Mr. Gorman have with regard to your risk premium analysis?

A. Mr. Gorman objects to my use of a forecasted, rather than a current interest rate, in my risk premium analysis. (Gorman at 72)

Q. Why do you use a forecasted, rather than a current interest rate, in your risk premium analysis?

A. I use a forecasted interest rate because the fair rate of return standard requires that Gulf have an opportunity to earn its cost of equity during the period when rates are in effect, and the rates approved in this case will not come into effect until later in 2017.

Q. Does Mr. Gorman also use forecasted interest rates in estimating Gulf's cost of equity in his risk premium approach?

A. Yes. Mr. Gorman uses forecasted, rather than current interest rates in his risk premium analysis comparing the average allowed return on equity for

electric utilities to a forecasted yield on thirty-year Treasury bonds. (Gorman at 48)

Q. Does Mr. Gorman attempt to estimate the cost of equity you would have obtained from your ex ante risk premium analysis if you had used current bond yields rather than forecasted bond yields?

A. Yes. Mr. Gorman claims that my ex ante risk premium analysis would have produced a cost of equity equal to 8.68 percent to 9.25 percent if I were to use an A-rated utility bond yield of 3.98 percent and a Baa-rated utility bond yield of 4.55 percent. (Gorman at 74).

Q. Do you agree with Mr. Gorman's claim that your ex ante risk premium analysis would produce a cost of equity result in the range 8.68 percent to 9.25 percent if you were to use utility bond yields in the range 3.98 percent to 4.55 percent?

A. No. Mr. Gorman obtains these incorrect results by adding my estimated 4.7 percent equity risk premium reported in my direct testimony to the 3.98 percent and 4.55 percent current yields on A-rated and Baa-rated utility bonds. However, Mr. Gorman fails to recognize that my estimated ex ante risk premium depends on the value of the interest rate employed in the study through the estimated regression equation described in Appendix 4 of Exhibit JVW-2 to my direct testimony. Although 4.7 percent is the correct ex ante risk premium estimate given an interest rate of 6.2 percent, the correct ex ante risk premium estimate when the interest rate is 3.98 percent is 6.0 percent (6.0 = 8.4 – 0.60 x 3.98). When the interest rate is 4.55 percent,

the ex ante risk premium estimate is 5.7 percent (5.7 = 8.4 - .60 x 4.55). Adding the correct 6.0 percent estimated ex ante risk premium to the interest rate of 3.98 percent produces an ex ante risk premium cost of equity equal to 10.0 percent. Adding the correct 5.7 percent estimated ex ante risk premium to the interest rate of 4.55 percent produces an ex ante risk premium cost of equity equal to 10.2 percent. These results exceed Mr. Gorman's incorrect estimates by 100 and 132 basis points.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

GULF POWER COMPANY

Before the Florida Public Service Commission
Rebuttal Testimony of
Lee P. Evans
Docket No. 160186-EI
In Support of Rate Relief
Date of Filing: February 8, 2017

Q. Please state your name, business address and occupation.

A. My name is Lee Evans and my business address is One Energy Place, Pensacola, Florida 32520. I am employed by Gulf Power Company (Gulf or the Company) as the Pricing Supervisor.

Q. Have you previously filed testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my testimony is to address the factual inaccuracies and flawed analysis in the testimony of Federal Executive Agencies (FEA) Witness Alderson with regard to Gulf Power's proposed load research and test year cost allocators. Gulf Witness O'Sheasy addresses other areas of Ms. Alderson's testimony in his rebuttal testimony. I also address reasons why the Commission should not misapply a limit, typically applied to a class of customers, to individual customers within a rate class as discussed by Staff Witness Harlow. Gulf Witness McGee addresses other areas of Ms. Harlow's testimony in his rebuttal testimony.

Q. Are you sponsoring any rebuttal exhibits?

A. Yes. Exhibit LPE-2, consisting of one schedule, was prepared under my supervision and direction, and the information contained therein is true and correct to the best of my knowledge and belief.

Q. Please summarize Ms. Alderson's criticism of Gulf Power's proposed 2017 allocation factors.

A. Ms. Alderson questions the accuracy of Gulf Power's 2017 allocation factors. She postulates that, absent an explanation such as customer-specific load growth information, the ratio of energy to demand should remain the same within customer rates when comparing the 2015 load research data to the 2017 test year projections. Ms. Alderson's table, Exhibit AMA-4, and her associated argument are the result of a fundamentally flawed analysis.

Q. Please describe how Ms. Alderson's analysis reflected in her Exhibit AMA-4 is flawed.

A. Ms. Alderson's analysis improperly compares data for individual voltage levels to cost allocations made across customer classes. As I discuss later, she also uses the data incorrectly. Ms. Alderson's underlying assumption is that a change in energy, whether measured as the rate class's total energy or a rate class's voltage level, from the 2015 load research year to the 2017 test year, should move in direct proportion to the change in contribution it makes to corresponding 12-CP. In fact, these ratios do not move proportionately because Gulf's forecasted monthly system peaks do not

change proportionally to changes in class-level energy. Moreover, Ms. Alderson inexplicably compares rate class energy and 12-CP data to NCP data for only certain voltage levels within that rate class. Finally, Ms. Alderson builds on this flawed analysis to allege the existence of "variances" in four rate classes: RSVP, LP, LPT and RTP in lines 2, 5, 6, and 7 of AMA-4, respectively.

Q. Why is Ms. Alderson's analysis in Exhibit AMA-4 related to the RSVP rate flawed?

A. The energy forecast for Rate RSVP is largely driven by the forecast for the number of customers on Rate RSVP. The energy forecasts for RS and RSVP customers are developed by means of the method described at length in Gulf Witness Park's direct testimony. The increase in forecasted energy use for customers on the RSVP rate is a result of Gulf's forecast that additional customers currently on Rate RS rate will select Rate RSVP in the test year. Customers moving from Rate RS to Rate RSVP would not impact the overall energy forecasted for the Residential Class. They would just shift the energy from RS to RSVP. Since the resulting energy total for the Residential Class does not change, the energy allocators which are used together in Mr. O'Sheasy's cost-of-service study to represent the Residential Class as a whole do not change. Therefore, these forecasted changes between RS and RSVP customers have no impact on cost allocations.

Q. Do you have anything further to add regarding Ms. Alderson's discussion of the RSVP rate?

A. Yes. In footnote 11 on page 13 of her testimony, Ms. Alderson erroneously states that, based on her reading of Gulf's tariffs for Rate RSVP, this rate does not include a critical pricing rate. Contrary to her statements, Rate Schedule RSVP does provide four distinct pricing tiers, including a critical period, and uses the Energy Conservation Cost Recovery Clause (ECCR) to achieve the price differentials among these four price tiers. The pricing tiers for Rate RSVP are clearly listed in Gulf's Tariff in Rate Schedule ECC, Sheet No. 6.38, attached as Schedule 1 of Exhibit LPE-2. This tariff sheet is also available to the public via www.GulfPower.com/pdfs/rates/ecc.pdf.

Q. Why is Ms. Alderson's analysis in Exhibit AMA-4 related to the LPT rate flawed?

A. When addressing the LPT rate in her table, Ms. Alderson makes an inaccurate comparison when referencing the 2015 load research year and the 2017 test year data for LPT NCP demand. Ms. Alderson inexplicably compares the LPT class level NCP for the 2015 load research year, as seen in line 6, column G of Exhibit AMA-4, to the sum of only voltage levels F and G NCP in the 2017 test year. The value for the 2015 load research year is for LPT customers at all voltage levels of service. The value for the 2017 test year is merely for those customers at levels F and G, since it is only those voltage service levels that use the NCP allocator. Such a comparison is inappropriate and oddly inconsistent with her comparisons of other rates within Exhibit AMA-4. If the appropriate data point of 65,497 kW were

included in the table, the 26 percent decrease shown in line 6, column I, which Ms. Alderson claims is the "variance," would decrease to a zero percent change. In other words, there would be no "variance" if Ms. Alderson had properly performed her analysis.

Q. Please discuss the two remaining rates Ms. Alderson highlights in her Exhibit AMA-4.

A. The final two rates from Exhibit AMA-4 that Ms. Alderson highlights are Rates LP and RTP. For these rates, the differences in the ratios of energy to demand between the 2015 load research data and the 2017 test year are explained by the fact that Gulf projected known customer changes among these rate classes, including customer additions to these rate classes. These customers have different energy to NCP and/or CP relationships than those of the members of the rate group before the rate switching occurred. Ms. Alderson concedes in her testimony that assumptions for known customer changes could explain discrepancies in these ratios, and this is indeed the case with these rates.

Q. Do you agree with Ms. Alderson's conclusions about Gulf's load research and test year cost allocators?

A. No. Gulf's load research and test year cost allocators were developed following customary methods as described in the description on page 1 of MFR E-11. Ms. Alderson's faulty analysis is based on her erroneous assumptions and her incorrect data and calculations.

Q. Ms. Alderson suggests an alternative revenue allocation among the rate classes. Do you agree with her revised revenue allocation?

A. No. Ms. Alderson bases her revised revenue allocation on her erroneous and unsupported conclusion that the 2017 test year cost allocators are incorrect. To the contrary, Gulf's test year cost allocators are appropriate and based on the same methodology submitted by Gulf and approved by the Commission in previous base rate proceedings. As shown in MFR E-8 and summarized on Schedule 2 of Exhibit LPE-1 of my direct testimony, Gulf's needed overall base rate increase of 19.2 percent has been allocated across rate classes in order to move the rate of return for each class toward the overall retail average rate of return. In doing so, an indexed rate of return of 1.00 was achieved for classes representing almost 94 percent of Gulf's retail customers.

Q. Please summarize Staff Witness Harlow's testimony as it relates to gradualism and the 'limitation practice.'

A. Ms. Harlow, on page 15 of her filed testimony, alludes to the possibility of the Commission applying, under the banner of gradualism, its historical practice of limiting increases to entire rate classes to individual customers within a single rate. Ms. Harlow acknowledges that this approach deviates from past practice but injects a reference to the Commission's 'broad authority' relating to rate setting.

Q. Do you have any concerns with Ms. Harlow's suggestion?

A. Yes. If the Commission were to apply a specific limit at the individual customer level, as opposed to the Commission's customary limit at the rate class level, all of the pricing in this rate proceeding would be impacted. Additionally, applying a limitation of 1.5 times the system average increase for each individual customer would materially affect how utilities develop their pricing in future Commission proceedings.

Q. How would the application of a 1.5 times limitation to individual customers have such broad impacts?

A. Rates, or prices, are not developed in isolation. Prices are designed to achieve the overall requested revenue requirement. Altering the prices in a single rate could necessitate that the overall revenue sought by another rate or rates be adjusted. Additionally, the relationships of individual pricing components within a single rate must be considered in concert with the relationships among pricing components in other rates available to similar customers. An overall balance must be achieved both within a rate and among all rates. Layering on such a precise and cumbersome requirement to ratemaking practices would be wholly and totally impractical, add significant and unnecessary complexity, and produce unintended outcomes.

Q. Do you have examples of such unintended outcomes?

A. Yes. There are scenarios in which limiting the rate increase for each customer to 1.5 times the system average increase would cause an entire rate class's allocated increase to be limited. In turn, classes projected to be

at parity would then be pushed to be above parity. This undesirable outcome could be the result of subgroups of customers within a rate with very poor load factors being especially subsidized to the detriment of large groups of customers.

Q. Should the Commission consider the customer impacts from a rate increase?

A. Certainly. As I describe more fully in my direct testimony, Gulf's Advanced Pricing Package provides equity and fairness among customers. Furthermore, as discussed by Gulf Witness McGee, the more equitable base charge and corresponding lower energy charge are being proposed in combination with new, optional residential demand rates to provide our customers more opportunities for control. These new, optional demand rates are likely beneficial to many of the low usage customers Ms. Harlow addresses. Additionally, the proposed Low Income Rider will ensure that no qualified low income customer in an occupied residence will see a bill increase due to the rate structure change, regardless of usage.

Q. Does this conclude your testimony?

A. Yes.

GULF POWER COMPANY

Before the Florida Public Service Commission
Rebuttal Testimony of
Michael T. O'Sheasy
Docket No. 160186-EI
In Support of Rate Relief
Date of Filing: February 8, 2017

Q. Please state your name, business address and occupation.

A. My name is Mike O'Sheasy. My business address is 5001 Kingswood Drive, Roswell, Georgia 30075. I am a Vice President with Christensen Associates, Inc.

Q. Have you previously filed testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. I rebut the testimony of Witness Rábago (Southern Alliance for Clean Energy and the League of Women Voters of Florida) and Witness Alderson (Federal Executive Agencies) related to cost of service issues.

Q. Please outline your rebuttal of Mr. Rábago.

A. First, I correct several mistakes in Mr. Rábago's critique of the Minimum Distribution System (MDS). Then I clarify why MDS is the appropriate methodology for classifying distribution costs and subsequently enables the most appropriate allocation of Gulf's distribution costs.

Second, I explain why a 1 non-coincident peak (1 NCP) allocator is the most appropriate allocator for apportioning Gulf's distribution demand-related costs to the various rate classes.

Q. Please outline your rebuttal of Ms. Alderson.

A. I explain why the best allocator for Gulf's production investment-related costs is 12 monthly coincident peak (12 MCP) & 1/13th energy, and not the 4 summer coincident peak (CP) or the 4 summer/1 winter CP methods she recommends.

I. Rábago MDS Testimony

Q. Mr. Rábago recommends that the Commission not approve the use of MDS. Do you agree with Mr. Rábago?

A. No. As I stated in my direct testimony, use of MDS for Gulf is an accurate, cost causative cost-of-service methodology. Additionally, Mr. Rábago has made several mistakes or mischaracterizations in coming to his conclusion regarding MDS.

Q. Please explain what you mean by mistakes or mischaracterizations.

A. Throughout his testimony, Mr. Rábago refers to a change from the present rates for the residential revenue requirement. He states that this change was caused by two major factors: first, a change to using MDS in the

allocation process (p. 4, lines 15-22), and second, the introduction of the Advanced Pricing Package.

Q. Is Gulf's use of MDS in the allocation process a change as Mr. Rábago asserts?

A. No. Gulf's present rates and present revenues are based on the MDS methodology. Both the present rates and present revenues shown in Gulf's recommended cost-of-service study provided in Exhibit MTO-2 are based upon the use of the MDS. The cost-of-service study with the MDS was the study used in the Commission-approved Stipulation and Settlement Agreement in Gulf's last rate case, Docket No. 130140-EI. The MDS methodology was also included in a cost-of-service stipulation that was approved by this Commission in Gulf's prior rate case, Docket No. 110138-EI.

Q. Mr. Rábago claims that "through the cost allocation process, the Company proposes to increase the total revenue requirement assigned to the residential class by more than 20%, or more than $68 million." Is his assertion correct?

A. No. The proposed increase is $61 million as shown in Exhibit MTO-2, Schedule 1.10. Moreover, there is no change in cost allocation between the present revenue requirement (which is based upon Gulf's present rates) and the proposed revenue requirement (which is based on Gulf's proposed rates) for any of the rate classes.

Q. Mr. Rábago states that the change in residential revenue requirements is accomplished through use of a proposed minimum system method, as well as through increases in costs. Even though use of MDS is not new and is indeed used for current rates and revenue requirements, can you estimate the impact of using MDS or not using MDS for proposed rates?

A. Yes, the two versions shown on MFR E-6b can be used for such an estimation. By comparing the revenue requirement on line 13, column (4) of MFR E-6b, page 1 of 2 with MDS to page 2 of 2 without MDS, the difference would be $6,829,000. This amount is less than 2 percent of the residential rate class's overall revenue requirement.

Q. So, Gulf is not introducing a change to the cost-of-service methodology upon which present rates are based?

A. That is correct. Both Gulf's present rates and proposed rates are based on the use of MDS.

Q. Does MDS have a logical cost-causative foundation?

A. Yes. This is explained in my direct testimony beginning on page 17.

Q. Is MDS accepted by National Association of Regulatory Utility Commissioners (NARUC) as a reasonable methodology?

A. Yes.

Q. Is MDS commonly used by other utilities?

A. Yes. It is used by several nearby utilities, including all utilities in the Southern Electric system, Duke North Carolina, and South Carolina Electric and Gas (SCE&G), as well as other utilities in Florida.

Q. Mr. Rábago says that Professor James Bonbright (a respected utility economist and author) rejected the MDS. Do you agree with his characterization as a "rejection"?

A. No. In Professor Bonbright's often-referenced book *Principles of Public Utility Rates*, he opines that including a minimum-sized distribution system among the customer-related costs seems 'indefensible,' but he continues to add that it is even less reasonable to place them in demand-related costs. He therefore suggests that the MDS should be recognized "as a strictly unallocable portion of total costs." (Page 492) Despite Mr. Rábago's assertions otherwise, Professor Bonbright ultimately does not address where to place these costs in ratemaking.

II. Rábago 1 NCP Testimony

Q. Beginning on page 19 of his testimony, Mr. Rábago criticizes the use of the 1 NCP for primary and secondary distribution cost allocation. Why does Gulf use the 1 NCP?

A. To address this question, one needs to consider how Gulf decides upon the sizes and amount of equipment to install. Gulf makes these decisions by

estimating the maximum loads that will need to be served at any time. This maximum loading may be different in size and occur at a different time for one circuit versus another, or even one line transformer versus another. The peak loading on these pieces of equipment does not occur when the system peaks. The system peaks are referred to as the system coincident peaks (CP). They drive production and transmission equipment costs but not distribution equipment costs. The peaks that drive primary and secondary distribution costs are best reflected by each rate class's maximum non-coincident peak demand for the year (1 NCP). Gulf's 1 NCP allocator considers that some equipment is driven by a rate class's specific peak. For instance, line transformers serving residential customers may be driven and sized for the incremental air-conditioning loads in the summer which cause the residential rate class peak.

Q. What about circumstances in which the equipment is being shared by multiple rate classes?

A. Because the 1 NCP allocator is comprised of multiple rate classes, it shares these costs amongst the rate classes.

Q. So, if different distribution equipment may be expected to have different individual peak demands that occur at different times, does Gulf track by asset the specific peak expectations, when they occur, and who will cause them?

A. No, and to my knowledge, no utility does so for cost allocation purposes. Instead, utilities and regulators have agreed over time to use an NCP that is

based on the rate class or the individual customers as a proxy. In the NARUC *Electric Utility Cost Allocation Manual*, page 97, it explains, "Consequently, customer-class noncoincident demands (NCPs) and individual customer maximum demands are the load characteristics that are normally used to allocate the demand component of distribution facilities."

Q. Mr. Rábago proposes that this allocator approach overstates demand-related costs. Is Mr. Rábago correct?

A. No. Demand-related costs are whatever they are regardless of the allocator to the rate classes. The use of 1 NCP as an allocator for primary and secondary distribution costs has nothing to do with the amount of demand costs to be allocated. Moreover, the 1 NCP allocator does a good job of apportioning these demand costs amongst the rate classes in a fair manner, as inferred by NARUC's approval of the methodology.

Q. Has the 1 NCP by rate class methodology been used by Gulf for previous rate case filings?

A. Yes, at least as far back as rate case filings in the 1980's. It was used in Gulf's last rate filing in Docket No.130140-EI. The use of the 1 NCP allocator produces stable results and is an influencing factor in present rates.

Q. Does the fact that 1 NCP has been used in the past mean it must be used in the future?

A. No, not necessarily. A change in methodology, though, should be driven by compelling evidence that there is a better methodology. Having seen none, Gulf is convinced that 1 NCP is the best allocator for distribution demand costs.

Q. Mr. Rábago on page 35 of his testimony, line 9, suggests that modifying "the 1 NCP cost allocator would also reduce the volumetric charge for residential customers and thus the ultimate rate impact." Would this be a good idea?

A. No, the 1 NCP allocator is not in need of modification. Furthermore, one should not modify a cost-causative allocator because of a desired "ultimate rate impact." One should determine cost as accurately as possible and then decide on what is the desired/proposed rate impact via the rate design.

Q. Please summarize your rebuttal of Mr. Rábago.

A. The MDS has been Gulf's preferred and most cost-reflective methodology for dividing distribution costs into demand and customer-related. It was included in a stipulation approved by this Commission in Docket No. 110138-EI and was a component of the approved settlement of Gulf's last rate case Docket No. 130140-EI. MDS is commonly used by other utilities and approved for use by NARUC. We recommend its approval here.

Gulf has used 1 NCP by rate class for many years to allocate primary and secondary distribution costs, and it has been approved by this Commission in numerous dockets. It produces reasonable and stable results. It is the most practical cost-reflective allocator for Gulf's cost-of-service study. We recommend its approval here.

III. Alderson Production Cost Allocation

Q. Do you agree with Ms. Alderson's recommendation to adopt a production investment-related cost allocator using either the 4 summer coincident peak (CP) or 4 summer/1 winter CP method rather than 12 MCP & 1/13th energy allocator?

A. No, I do not. I think the 12 MCP and 1/13th energy is a superior allocator of production (generation) investment-related costs for Gulf.

Q. What is the premise of Ms. Alderson's recommendation to use 4 CP (or 4 CP/1 CP) for allocation of Gulf's production investment-related costs?

A. Her argument focuses upon the idea that the target reserve requirement should determine the selection of the production function allocator. Additionally, she claims that the target reserve requirement "ultimately is a formula calculated solely on the system's summer and winter peak demands." However, Gulf Power and the Southern electric system consider much more than the 4 summer and 1 winter peak load demands in setting the Company's reserve margin. In determining its optimal reserve margin,

consideration is given to reliability risks in every hour of the year, even though the majority of the risk occurs during the summer and winter peak months. In fact, even though Gulf remains a summer peaking system, reliability risks are growing in the winter and shrinking in the summer. Also, because of necessary heavy scheduling of unit maintenance in the spring and fall and the risk of unplanned outages in those same seasons, reliability risks can be spread across a number of hours of the fall and spring seasons. Finally, I believe there are other factors such as cost minimization influences, allocator stability, fairness, and history of use, which should be considered when selecting the production investment-related allocator besides simply the reserve margin or the month's percent of annual system peak as shown in Ms. Alderson's Exhibit AMA-1.

Q. Please expand on why reliability risks are increasing in the winter and shrinking in the summer.

A. Winter peak loads, which occur primarily during the early morning hours, ramp-up more rapidly than do summer peak loads, which occur more often in the afternoon hours. These more rapidly-climbing winter peak loads create more reserve risks per MW of load between winter and those of summer. Additionally, increasing solar photovoltaic (PV) penetration, which may help serve summer afternoon peaks, provides little during early morning winter peaks. Lastly, forced outage rates on generation generally increase during the most extreme winter peaks due to the risks of freeze-ups of instrumentation and fuel issues during the extreme cold weather experienced in many winters.

Q. Did the Southern system peak for 2016 occur during the summer?

A. Yes, it did, but this was the first such occurrence since 2013.

Q. You mentioned that every hour is analyzed by system planning. Don't the summer months contain the majority of these hours of high reliability risk?

A. Not nearly so much as in the past. Reliability risks associated with a deficiency of generation to serve load at any given time vary throughout the year. Historically on the Southern electric system, about 85 percent of generation deficiency reliability risk fell during the summer months and 15 percent during the winter months. Over the last 10 or 15 years, there has been a gradual but growing dependence on natural gas-fired capacity, and in recent years on solar PV resources. Additionally, as customers' heating and air conditioning systems are changed out over time, the efficiency improvements in the new systems decrease demand on the summer peaks much more so than they reduce demand on the early morning winter peaks. With these combinations of changes, reliability risks are now closer to 50/50.

Q. If 4 CP using summer months fails to adequately address the growing reliability needs of winter, what do you think about 4 summer/1 winter?

A. A 4 summer/1 winter allocator fails to go far enough in capturing the reliability needs of Gulf Power. Besides the growing winter and shrinking summer reliability risks that I previously mentioned, one winter month is simply not enough winter months, in part because it is impossible to know which of the winter months will have the coldest temperatures and,

therefore, the highest winter loads. Furthermore, growing reliability needs in the winter months coupled with on-going summer constraints means that more and more scheduled maintenance will be squeezed into fall and spring seasons. Unit maintenance must be planned accordingly, which can result in unit availability less in non-peak seasons than peak seasons. The 12 MCP & 1/13th energy allocator will best reflect Gulf's reliability constraints.

Q. What are some of those additional factors that you mentioned?

A. As I just explained, 12 MCP & 1/13th energy best reflects Gulf's reliability constraints. It also accounts for Gulf's objective of striving to minimize overall cost of production.

Q. Please continue.

A. Because Gulf must be able to serve load in every hour of the year and strive to do so at the least cost, Gulf, like most utilities, builds base load plants in addition to peakers. While peakers are built basically for serving reliability needs, base load plants have a dual purpose of serving reliability needs as well as minimizing operational costs throughout the year. These base units are considerably more expensive than peakers, and their costs go into the overall production function as do peakers. Therefore, it is logical to allocate production costs throughout the year, which the 12 MCP and 1/13th energy does. The 4 CP or 4 CP/1 CP would spread these costs to a much more limited number of months and hours. It is conceivable that an allocator with as few as 4 or 5 CPs might enable some rate classes to escape any

allocation of production costs at all, while a 12 MCP and 1/13th energy allocator will not do so.

Q. Has Gulf used the 12 MCP and 1/13th energy allocator for many filings?

A. It has been used since the late 1980's and obviously influenced present rates. We've found it to produce stable results over time. It has also aligned well with FERC's preferences.

Q. What production allocator does FERC favor?

A. In the past, FERC has used 12 MCP for both production and transmission in many cases. FERC has also recommended a test of peak loads to suggest whether to use 12 MCP or 4 MCP.

Q. Did you conduct this FERC test for Gulf?

A. Yes, and it resulted in a recommendation of 12 MCP.

Q. Is it your conclusion that 12 MCP and 1/13th energy is the most appropriate allocator for Gulf's production costs?

A. Yes.

Q. Does this conclude your testimony?

A. Yes.

GULF POWER COMPANY

Before the Florida Public Service Commission
Rebuttal Testimony of
Robert L. McGee, Jr.
Docket No. 160186-EI
In Support of Rate Relief
Date of Filing: February 8, 2017

Q. Please state your name, business address and occupation.

A. My name is Bob McGee. My business address is One Energy Place, Pensacola, Florida 32520. I am the Regulatory and Pricing Manager for Gulf Power Company (Gulf or the Company).

Q. Have you previously filed testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to address the assertions and mischaracterizations of Witness Rábago (Southern Alliance for Clean Energy or SACE and League of Women Voters of Florida) and Witness Loiter (Sierra Club), collectively referred to as the intervenors, as well as address the testimony of Staff Witness Harlow.

Q. Are you sponsoring any rebuttal exhibits?

A. Yes. I am sponsoring Exhibit RLM-2, Schedules 1 through 4. Exhibit RLM-2 was prepared under my direction and control, and the information contained therein is true and correct to the best of my knowledge and belief.

Q. Do you have any initial observations about the intervenor testimony in this docket?

A. Yes. The testimony provided by intervenor witnesses is voluminous and is somewhat difficult to follow. In an effort to focus my rebuttal on the key points in this docket, I will not attempt to address every point of inaccuracy, misunderstanding, or mischaracterization of my own direct testimony, but instead I will respond to what appear to be the main issues. The absence of a response on my part to any particular argument offered by the intervenor or Staff witnesses should not be construed as acquiescence or agreement.

Q. Please provide an overview of your rebuttal.

A. Gulf's proposed Advanced Pricing Package for residential customers consists of the following four elements:

- A lower energy charge and a higher base charge to more equitably allocate demand-related costs
- Optional demand rates to give residential customers more control and options
- A low-income credit to help qualifying residential customers transition to the new rate structure
- Additional and expanded conservation measures to help residential customers save energy and reduce their bills

The purpose of Gulf's proposal is to better align our residential rates with our costs, to provide more options for customers, to reduce customer bill variability, and to better serve our low-income customers. Although the

consultants testifying on behalf of the Southern Alliance for Clean Energy, the League of Women Voters and the Sierra Club (the intervenors) desire to raise customers' energy rates to make it more expensive for our customers to purchase more electricity, Gulf is proposing a lower variable charge, more in line with costs of producing and delivering that energy, to better serve our customers.

Gulf's proposal is a package that the Commission should consider in its entirety, not piecemeal as the intervenors have done. For instance, the intervenors have overlooked the fact that Gulf's proposed optional demand rates would be a viable, cheaper alternative for many customers who use very little electricity or who are able and willing to closely control their usage. Gulf already, even before the rates have been approved, provides information on its website on how customers' demand is affected by their usage patterns and how that demand could be affected by changes in their use. Monthly demand data will be available to customers when they are ultimately presented with the new rate options.

The SACE and Sierra consultants claim that customers will have no control over their bill, ignoring the fact that all customers will still pay more if they use more and pay less if they use less. Customers will continue to have the ability and incentive to control their bills through their energy usage.

Finally, SACE and Sierra recommend rejection of Gulf's proposal to more effectively serve low-income customers with a bill credit designed to assist

those who need it most. If Gulf's proposal is approved, qualifying low-income customers will have a lower fixed charge and a lower energy charge. The SACE and Sierra suggestion ignores the income status of all of our customers while raising our customers' energy charge.

Q. Don't the intervenors argue that energy efficiency and solar investment payback are adversely affected by Gulf's proposal?

A. Yes, but they neglect to mention that the effect is rather small. For example, a typical residential solar photovoltaic (PV) rooftop installation of 5 kW would have an 11 year payback under current electric rates and current federal subsidies. Under Gulf's proposed electric rates, that payback would extend to 12.5 years, a 1.5 year extension. SACE and Sierra also don't mention that their solution is an argument in favor of higher rates generally, which affects all customers. Exhibit RLM-2, Schedule 1 contains a payback calculation for rooftop solar. Moreover, Gulf's proposed demand rate and time-of-use demand rate will provide new avenues for customers to reduce their bills by controlling both their weather sensitive peak demands and their kWh use.

Q. What is the key difference between Gulf's proposed two-part residential rate and the intervenors' suggested alternative?

A. Gulf is proposing an enhanced residential rate structure which is based on a new methodology for appropriately allocating demand-related costs to the two parts of the traditional two-part rate (the base charge and the energy charge). Demand-related costs include things like distribution, transmission

and generation investment and maintenance. This new approach, which I refer to as the B&G methodology, was developed by Drs. Larry Blank and Doug Gegax. Their methodology is cost-based, objective, technically sound, and very much in line with traditional ratemaking principles. The effect of the Blank and Gegax methodology is a more equitable allocation of demand-related costs, which reduces the per kWh energy charge and increases the fixed base charge. The intervenors, on the other hand, propose to include all demand-related costs in the energy charge with the exclusive purpose of raising the variable energy rate as much as possible. Witness Rábago, in his zeal to raise the energy charge, goes so far as to suggest that customer-related costs should be included in the variable energy rate.

Q. The intervenors have pointed to the fact that the Blank and Gegax (B&G) methodology is relatively new and assert that it should not be approved for this reason. Staff Witness Harlow also mentions that the B&G methodology has not been applied in previous base rate proceedings. Does the fact that an idea is new disqualify it?

A. Absolutely not. Innovation necessarily requires some element of newness. Although the B&G methodology is relatively new, it is a straight-forward, well-reasoned, objective approach built on the strong foundation of demand rates—something the electric utility industry has used for well over 100 years.

Q. How do you respond to the argument that the B&G methodology should not be accepted by this Commission until further information is developed to support it?

A. The soundness of the B&G methodology and the completeness of its supporting data are fully established in the record before this Commission. The proceeding we are currently undertaking is the exact venue for proper review of the methodology. The B&G methodology has been published for nearly a year and Gulf has been responding to extensive discovery since last October. Notably, the intervenors do not identify any actual fault, flaw or gap in the B&G methodology; they simply catalogue their dislikes for the results.

Q. Are the issues raised by the intervenors surrounding higher base charges and lower energy charges new?

A. No. Intervenors have been arguing against another rate design that also increases base charges, called Straight Fixed Variable (SFV), for some time. The SFV rate design typically places all demand-related costs into the fixed charge. In spite of the fact that Gulf is not proposing such a rate, Witness Rábago points to an Illinois case addressing SFV rates that occurred in 2014, and he includes the Illinois Commerce Commission's order in his Exhibit KRR-7.

Q. What was Witness Rábago's stated reason for referring to the Illinois case?

A. To show that "…other Commissions [have] addressed the cost-causation argument offered by the Company [i.e. Gulf Power]…" (Rábago, p. 15)

Q. What observations do you have regarding the Illinois case Witness Rábago uses to support his position?

A. The most striking thing is the fact that the B&G methodology, had it existed at that time, would have solved the problem in the Illinois case. The intervenors and staff in that case, aligned against the utility's request to raise their fixed fee for gas customers, argued amongst themselves over how much demand-related costs should be included in each component of the two-part rate—because no party, including the utility, proposed an objective criteria, like the B&G methodology, for determining exactly how much demand-related costs should be put into each component of the residential two-part rate. In the end, the Illinois Commerce Commission decided to put all of the demand-related costs into the energy charge, in part because the best proxy they had for a demand charge was the energy charge. However, as I stated in my direct testimony, the allocation of all demand-related costs to the energy charge results in an unnecessarily large energy charge, causing a misalignment between cost-causers and those who pay. The B&G methodology rectifies this by objectively improving alignment of rates with costs using a three-part demand rate.

Q. What did the intervenors opposing a higher fixed charge in the Illinois case have to say about cost-causation and rate design?

A. One intervenor in that case advocated aligning rates with cost-of-service results— "…the rate design Mr. Rubin [witness opposing the utility] proposes for the residential classes tries to mimic the way in which costs

are allocated to the residential class, so that subsidies among residential customers are minimized." (Rábago Exhibit KRR-7, p. 196).

Q. Is this similar to your own position?

A. Yes. As I stated in my direct testimony, "Mr. O'Sheasy's cost of service study develops three categories of costs associated with serving residential customers: customer-related costs, demand-related costs, and energy-related costs. A three-part demand rate best aligns rates with costs because it mirrors these cost categories with three discrete rate components: a customer charge, a demand charge and an energy charge."

Q. Do you have any final observations regarding that Illinois case cited by Witness Rábago?

A. Yes. The Illinois Commerce Commission did not have the benefit of the following as they considered what to do with demand-related costs in two-part rates:

- The B&G methodology, not yet published at the time, was not before the Illinois Commission.
- The utility did not propose to offer optional demand rates to its customers so they could choose, in the alternative, to pay for demand-related costs in proportion to the kW demand they place on the system.
- The utility did not propose to offer additional cost-effective conservation measures to help its customers save energy.

- The utility did not propose to offer customers a new low-income credit to help transition qualifying customers to the more equitable rate structure.

Q. What have Drs. Blank and Gegax written about the SFV rate design?

A. Drs. Blank and Gegax argued against SFV rate design in their 2014 paper entitled *Residential Winners and Losers behind the Energy vs. Customer Charge Debate*. The 2016 Blank and Gegax article relied on by Gulf in this current docket provides the completion of their 2014 research. Both papers stand for the proposition that all demand-related costs should not be put into the fixed charge, but some of them should. The April 2016 paper setting forth the B&G methodology provides a simple, cost-based, objective method for determining exactly how much is the right and fair amount of demand-related costs to put into each component of the residential two-part rate.

Q. Witness Rábago refers to the Electricity Journal, the publisher of the B&G article relied on in this case, as a "trade publication." (Rábago, p. 5) Do you agree with his choice of words?

A. No. The Electricity Journal, as I stated in my direct testimony, is a peer-reviewed journal. Its Editorial Advisory Board consists of members from the Natural Resources Defense Council (NRDC), Harvard University, Massachusetts Institute of Technology (MIT), Johns Hopkins University, National Regulatory Research Institute (NRRI), Regulatory Assistance Project (RAP), Edison Electric Institute (EEI), etc. The Electricity Journal is listed with Cabell's International: https://www.cabells.com/about-us, which

substantiates respected academic journals. The following definition illustrates the difference: "*In general, a trade publication will contain news, current events information, articles, and ads of interest to people in that industry or profession. Unlike scholarly journals, trade publications do not contain original research and are meant to be practical in nature. Their focus is on current trends and issues."* [http://courses.semo.edu/library/infolit/tradepublications.htm] The peer-reviewed article authored by Drs. Blank and Gegax and relied on in this case, stands in sharp contrast to the blog that Witness Rábago attaches to his testimony.

Q. Do you agree with Witness Rábago's assertion that the B&G methodology is an "arithmetic exercise"?

A. I do. In fact, that is a key strength of the B&G methodology—it is objective. Anyone, given the same data, and the means to perform a simple regression, would come to the same numerical conclusion. Another Florida utility recently requested that some amount of demand-related costs be placed in their residential customer charge, providing one page of testimony supporting that idea but with no logical reason for the amount. Gulf is not suggesting anything of the sort.

Gulf is not asking to put all demand-related costs into the base charge. Gulf is not asking to place some arbitrary amount of demand-related costs into the base charge. Gulf is requesting that an easily-determined, objective method (B&G) be used to more equitably allocate demand-related costs

between the energy charge and the base charge of the two-part residential rate.

Q. Witness Loiter appears to suggest that because several utility companies are sponsors of the Center for Public Utilities (CPU) that the validity of the study by Drs. Blank and Gegax is somehow called into question. Do you have any observation about his implication?

A. Yes. Witness Loiter's reference leaves a misleading impression because he fails to also point out that the Advisory Council for the CPU includes 51 public utility commissioners and consumer advocates from across the country, 47 industry experts representing the electric, gas, water, and telecommunications industries and three representatives of the National Association of Regulatory Utility Commissioners (NARUC). (Exhibit RLM-2, Schedule 2)

Q. The witnesses for SACE and Sierra Club claim that Gulf's demand rates do not properly align with costs. (Loiter, p.4-5) (Rábago, p.12) Do you agree with this claim?

A. Not at all. Traditional three-part demand rates, like those Gulf has employed in this case, have been used for over a hundred years in the commercial and industrial customer segments to appropriately price electricity service. Staff Witness Harlow recognizes the appropriateness of demand rates to better align costs with revenue. She states that "Three-part demand rates are also one ratemaking option to better align cost causation with revenue recovery, and to send improved price signals to customers on how their

actions impact system costs." Incidentally, the intervenors' testimony in the Illinois case Witness Rábago cites also asserts that rates should be aligned with costs and that demand rates do that better than two-part rates. (Rábago Exhibit KRR-7, p.172,196)

Q. Earlier you mentioned that Witness Rábago mischaracterized your testimony. Can you provide an example?

A. Yes, I will provide one example. This particular mischaracterization, which constitutes his critique of the B&G methodology, is found in several statements on page 11 of his testimony. There, he says that witness McGee "cites no cost of service analysis to suggest that high users create lower demand costs than low users." But I never said high users create lower demand costs than low users—this is a fabrication. Witness Rábago follows with a question: "Is it likely that witness McGee has discovered a condition among Company customers that demonstrates that high users are low demand-cost causers, and that low users are, in turn, high demand-cost creators?" and his answer: "No." Witness Rábago's Q&A is a continuation of his fabrication, which completely mischaracterizes my direct testimony. The positive slope of the B&G regression result is enough to refute this inane assertion.

My observation in direct testimony that Gulf's current residential rate structure "results in some customers [high users] paying more than they should for demand-related costs and others [low users] paying less than they should" (McGee, p.7) in no way implies that high users impose less

cost on the system than low users. Under Gulf's proposal, high users will pay more (the "use-more pay-more" principle still applies). Furthermore, high users will pay more for demand-related costs than low users will pay for demand-related costs—because half of all residential demand-related costs are still in the energy charge after B&G is implemented. This is appropriate and is justified by the analysis developed by Drs. Blank and Gegax. The B&G methodology explicitly incorporates higher demand-related charges for those who use more energy.

Q. What is your response to the intervenors' complaint that demand rates are more complex for customers to understand than two-part rates?

A. Although I think they exaggerate the extent of the matter, I agree with them and said so in my direct testimony. My objection is to the fact that they try to use this as a reason to reject Gulf's proposed Advanced Pricing Package, which is nonsensical because the residential demand rates proposed by Gulf are optional. The intervenors' arguments against residential demand rates are based on the false premise that Gulf is proposing mandatory demand rates, which Gulf has not proposed.

Q. Witness Loiter goes so far as to suggest that "the vast majority of residential customers are incapable of" knowing "what equipment and behavior contributes to that demand, and have the ability to modify behavior and equipment to control their demand." (Loiter, p. 10) What is your view of Gulf's customers' ability to learn about and respond to demand rates?

A. Witness Loiter seriously underestimates the ability of Gulf's customers to understand the basic concepts of knowing which equipment draws the most energy and to modify use of their equipment to affect simultaneous energy use. Gulf's customers have responded well to the Energy*Select*® program which includes a complex four-tier time-of-use critical peak pricing rate and in-home equipment. When that rate was first developed and rolled out to customers, there was no on-line access to real-time data. Customers were educated on and understood how the rate operated, when electricity cost more, and how to manage their usage to maximize their benefit. At the roll-out of Gulf's optional demand rates, customers will have available to them monthly max demand data for their premise over the previous year. If they choose a demand rate, their meter will display the appropriate billing determinants (energy kWh, max demand kW and, if applicable, on-peak demand kW) as they occur. As evidenced through discovery, Gulf has already provided, even before the rates have been approved and made available to customers, on-line educational material to help customers understand demand rates and actions customers can take to manage their demand. Witness Loiter's critique of Gulf's actions related to demand rates fails for two reasons: (1) the rates are optional so any customer who chooses not to understand them or manage them will not have to do so; and (2) Gulf is currently providing and will continue to provide adequate, helpful information to customers who may consider this type of rate.

Q. What is your response to the assertion that the B&G methodology is intended to "flatten the slope of the curve delineating how bills increase with usage"? (Rábago, p. 10)

A. This statement ignores an important aspect of the B&G methodology which is explained in my direct testimony. The whole point of running a simple linear regression, is to find a straight line that best fits the data—because a straight line represents a two-part rate in the B&G plot of bills versus kWh. The B&G methodology, as described in my direct testimony, appropriately collapses the plot of three-part bills into a two-part rate structure, a straight line.

Although it is possible to fit a curve to the data, it is a pointless exercise in this context. The result of such a fit would be a very peculiar rate design. Given a quadratic curvilinear fit, which is a second degree polynomial, the resulting "rate" has three components, one component of which is cents per squared kilowatt-hour. Furthermore, the cents per squared kilowatt-hour rate is negative (less than zero). Gulf is not proposing such an irrational idea as a rate to offer customers.

The important thing to be determined is which straight line, either the current two-part rate structure or the B&G two-part rate structure, best fits the data. One way to measure data fit is the coefficient of determination, otherwise known as r-squared. This is a statistical measure describing the amount of data variation accounted for by the approximating line. The

coefficient of determination is sometimes referred to as a measure of the "goodness of fit."

The coefficient of determination for the B&G straight line is 59 percent, indicating that this line accounts for a significant amount of the variation in the data. The coefficient of determination for the straight line representing Gulf's current rate structure, the structure that the intervenors propose we use, is 11 percent. It is clear from a simple comparison of these results that the current two-part rate structure does a terrible job of approximating a traditional three-part demand rate (and therefore the underlying cost structure) and that the B&G two-part rate is a vast improvement.

Q. What is your response to the comments of the intervenors and Staff regarding low-income customers?

A. Gulf has already addressed these concerns through Gulf's proposed Low Income Rider credit that completely nullifies the impact of the proposed rate structure change for qualifying customers in an occupied home. The intervenors' testimony on this issue is unnecessarily confusing. The amount of energy used by a low-income customer is a distraction from the more significant point that all qualifying low-income customers will benefit from both a lower fixed charge (base charge minus the $21 per month credit) and a lower energy charge under Gulf's proposal.

Q. What alternatives do SACE or Sierra Club propose to help low-income customers?

A. None. Worse yet, they recommend keeping the current rate structure which we know results in higher bills for the majority of customers who already struggle to pay their bills—customers who have a “D” credit rating. These customers may have recently received a disconnect notice, have not been able to meet their special payment arrangements, or have been cut for non-pay in the previous year. Sixty percent of these customers, Gulf Power customers struggling to pay their bills, will have lower bills as a result of the proposed rate structure change even without the benefit of a low-income credit. Furthermore, all customers, including those struggling to pay their bills, will experience lower month-to-month bill variability.

Q. Has anyone provided a critique of Gulf’s proposed Low Income Rider?

A. Yes. Staff Witness Harlow has raised two competing speculations regarding the implementation of the Low Income Rider: that our low-income credit may not reach enough customers—“Customers may be reluctant to divulge this personal information to Gulf, which may result in lower participation by those customers in need” (Harlow p. 17) or that it may reach too many customers—“Gulf may have underestimated the potential number of customers that will participate in the low income rider.” (Harlow p. 16) However, Gulf is confident that its proposed Low Income Rider appropriately balances the competing objectives of assisting the largest number of customers who need it most (based on an income standard) against the need to minimize impacts to all residential customers who are

funding the low-income credit. Notably, no witness has provided any evidence that rebuts Gulf's assessment of anticipated participation in the Low Income Rider program.

Q. Please address Witness Loiter's comments regarding elderly customers and the Supplemental Nutrition Assistance Program (SNAP) program.

A. Referencing a USDA report, Witness Loiter states that "Elderly customers, for instance, who often live on fixed incomes tend to live in smaller households and therefore are only eligible for SNAP at lower income levels." (Loiter, p. 19) Witness Loiter left out an important fact (also stated in that same section of the USDA report he referenced) that "Elderly SNAP recipients tended to receive relatively small benefit amounts for two reasons. First, they typically had higher average gross and net incomes than other households." (JML-13, p.34) The second reason mentioned in the report is the one Witness Loiter chose to highlight.

This same report on SNAP recipients indicates that the above-60 age bracket has about 30 percent higher net income on average. The point to be made here, besides the fact that Witness Loiter is not providing a balanced view of the facts, is that income is the appropriate determiner of financial need, not age, or kWh consumption level, or whether the customer's income varies in some unspecified way, or any other demographic characteristic of our customer base. Gulf's Low Income Rider uses SNAP participation as a qualifying criteria for two simple reasons: (1) SNAP is the largest public assistance program administered by the Florida Department of Children and

Families (and also is the largest qualifying program for Lifeline participation), and (2) it simplifies Gulf's role in determining income status of customers.

Q. Do you have any comments regarding the general approach the intervenors and Ms. Harlow take in responding to Gulf's proposal?

A. Yes. The intervenors and Ms. Harlow are not thinking about Gulf's proposal as a whole—as a package of four elements designed to work in harmony together. As they focus on one element or another, to the exclusion of other elements of the package, their truncated view results in poor analysis of Gulf's proposal.

For instance, a narrowly-focused review of customer use and income, outside the context of Gulf's proposed $21 per month low-income credit, is of little value because it ignores the significant and important relief Gulf Power has proposed for customers whose income level, not their kWh consumption or their age, qualifies them for this subsidy. Arguments against a higher base charge that ignore the proposed low-income credit are just not credible.

Another example is the speculation that sales may increase or energy efficiency achievements may decline, which completely ignores the significant additional cost-effective (RIM-passing) conservation measures Gulf has proposed—kWh savings that are literally enabled by the rate

structure change and that will evaporate into thin air if the rate structure change is not implemented.

Another example is a focus, in isolation, on the standard rate while ignoring the two new optional rates Gulf has very purposefully included in this package. No customer has to accept the higher base charge associated with the standard rate—because two rate options with lower base charges (RSD and RSDT) will be available to all residential customers under Gulf's proposed package. So, for instance, a customer with very low use (100 kWh) and low demand (10^{th} percentile) who chooses the RSD rate and makes no change to their usage will see no more increase on the new demand rate than if the Advanced Pricing Package were rejected (see Exhibit RLM-1, Schedule 6 of my direct testimony). Witness Rábago highlights these very customers on page 12 of his testimony in a circle he drew on a graph taken from my direct testimony—but Witness Rábago neglected to consider the benefit customers could achieve by selecting an optional demand rate without even changing their behavior. Exhibit RLM-2, Schedule 3 shows the effect of removing data points where customers save enough on rate RSD that their total bill increase from today's rates is no more than average. Furthermore, Witness Rábago recognizes that customers "through efficiency, conservation, or self-generation" may "reduce high peak demand", but he ignores the benefits these same customers could attain on a rate such as RSDT. (Rábago p.37)

Another clear example of this is Witness Rábago's suggestion that a higher base charge should be offered as an option. Gulf's objective in this filing is to appropriately and effectively restructure its rates for all residential customers to better align rates with costs, not to offer just another rate option. Witness Rábago also displays a lack of contextual thinking in his inappropriate but repeated use of the term "non-bypassable" to describe the higher base charge associated with the standard rate. The Advanced Pricing Package purposefully provides customers with viable options (RSD and RSDT) for avoiding the higher base charge.

Gulf's proposed Advanced Pricing Package must be considered as a whole to appropriately and fairly assess its potential impacts and implications. Arguments in isolation or arguments against things Gulf is not proposing such as SFV or mandatory demand rates are not appropriate critiques of Gulf's current proposal before the Commission.

Q. Aside from inappropriately isolated analyses and arguments against things Gulf has not proposed, what other arguments have the intervenors and Ms. Harlow made opposing Gulf's proposed Advanced Pricing Package?

A. All three have expressed dislike for the outcome. In other words, they don't oppose the methodology as much as they oppose the result. In short, they prefer higher energy charges. Witness Rábago even suggests throwing some customer-related costs into the energy charge for good measure. Witness Loiter does not think customers should buy more energy—even if their purchases are a result of better aligned rates and improved economic

efficiency. All three discuss extended payback of energy efficiency investment—as if payback were the highest and greatest goal of rate design—overlooking the fact that the impact of Gulf's proposal is rather small. Payback for a solar rooftop investment will extend from 11 years to 12.5 years—a 1.5 year extension. Payback for rooftop PV was already extended by half a year in January 2017 when Gulf reduced its clause rates.

Witness Rábago makes the implausible claim that customers will not be able to reduce their bills under the new rate structure because of the lower energy charge—ignoring the fact that customers will be able to regularly avoid 16.8 cents per kWh on the RSVP rate, or 9.7 cents per kWh on the standard RS rate, or $5.00 per kW and 8.7 cents per kWh on the RSD rate, etc. (Rábago, p. 29) The "use-less, pay-less" principle is still fully effective under Gulf's proposed rate structure. Even the higher base charge is avoidable by selecting one of the optional demand rates. Staff Witness Harlow points out that "Gulf's two optional residential demand rates may give customers who choose to participate more ability to control their bills."

Q. Staff Witness Harlow points out that Drs. Blank and Gegax did not estimate the effect of a lower energy charge and a higher base charge on sales. Did Gulf make such an estimate?

A. Yes. Gulf Witness Park has estimated the effect of the rate structure change on kWh sales and provides details in his testimony and supporting responses to discovery. Mr. Park's estimate indicates a slight increase in

sales, 0.7 GWh in the test year, as a result of Gulf's proposed rate changes, including the higher base charge and the lower energy charge.

Q. Did any witness offer a viable alternative to Gulf's estimate of the effect of proposed residential rates on sales?

A. No.

Q. Staff Witness Harlow asserts that Gulf's forecast model does not "appropriately account[s] for the potential impact on residential customer demand and energy usage due to the proposed change in rate structure" (Harlow, p. 9) and that "…Gulf has [not] provided sufficient information to the Commission regarding the potential impact on customer behavior and its sales due to the proposed rate structure change" (Harlow, p. 10) Do you agree with her assertions?

A. No, I do not. Gulf's residential sales forecast has, for each of the past 20 years I have been involved with the Company's forecast, included a total-bill customer response. This element of the multivariate regression model has consistently been a statistically significant and an important component of Gulf's forecast model.

Earlier in her testimony, Ms. Harlow states, "A lower energy charge can be expected to impact customer incentives to use energy efficiently. All else being equal, customers can be expected to increase energy usage due to a lower energy charge." (Harlow, p.8-9) In the case currently under examination by the Commission, where the proposed lower energy charge

is coupled with a proposed higher base charge, the “all else being equal” presumption does not hold.

Gulf Witness Merilatt addresses this topic further in his rebuttal testimony.

Q. Ms. Harlow suggests that Gulf may have to require monthly confirmation of SNAP benefits from customers enrolled in the Low Income Rider. Is this true?

A. No. Customers enrolling in the Low Income Rider will be required to produce a ‘Notice of Case Action’ from the Florida Department of Children and Families showing their SNAP eligibility. The ‘Notice of Case Action’ includes the start and end date of the customer’s eligibility for SNAP benefits. The date the customer’s SNAP eligibility expires will be entered into Gulf’s database. Prior to the expiration of the customer’s SNAP benefits, Gulf will notify the customer receiving the low-income credit that they must provide another ‘Notice of Case Action’ indicating that their benefits have been extended in order for them to continue receiving the low-income credit.

Q. Ms. Harlow asserts that “…customers with the lowest usage will be the most impacted by the proposed rate structure change.” (Harlow, p.8) Do you agree with this assertion?

A. No, because it ignores the very real possibility that a low-use customer would choose a demand rate which is more favorable to them even without changes in their behavior. For example, a customer with very low use (100 kWh) and low demand (10th percentile) who chooses the RSD rate will see

no more increase on the new demand rate than if the Advanced Pricing Package were rejected.

Q. Have you seen any arguments in the intervenors' or Staff's testimony that warrant further consideration?

A. Yes. Staff Witness Harlow addresses gradualism—wherein the rate structure change is deemed the appropriate thing to do, but should not be implemented all at once. Ms. Harlow offers an inadequate solution, suggesting a misapplication of a Commission rule of thumb for allocating costs to classes. This misapplication is appropriately rejected for reasons provided by Gulf Witness Evans in his rebuttal testimony. Nevertheless, Ms. Harlow raises an important issue.

To effectively address customer bill impacts in this case, several important interactions will need to be considered. For instance, Gulf's proposed increase in the base charge is accompanied by, and offset to varying degrees by, a decrease in the energy charge. Furthermore, some customers will find the optional demand rates economically beneficial, significantly mitigating total bill increases. Both of these facts reduce customers' total bill impacts. These and other factors are provided for consideration in Exhibit RLM-2, Schedule 4.

Q. Does this conclude your rebuttal testimony?

A. Yes.

GULF POWER COMPANY

Before the Florida Public Service Commission
Rebuttal Testimony of
James M. Garvie
Docket No. 160186-EI
In Support of Rate Relief
Date of Filing: February 8, 2017

Q. Please state your name, business address and occupation.

A. My name is James Garvie. My business address is 30 Ivan Allen Jr. Boulevard, Atlanta, GA 30308. I am the Compensation, Benefits and Human Resources Operations Vice President for Southern Company Services (SCS).

Q. Have you previously filed testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my testimony is to address the testimony of Office of Public Counsel (OPC) Witness Donna Ramas in which she inappropriately concludes that the Commission should disallow portions of Gulf's compensation and benefit expenses even though those expenses are currently paid at or below the median of the market. As I will show, not only are these expenses reasonable and appropriate costs of service for ratemaking purposes, but they are also a necessary part of Gulf's total package of compensation and benefits that allows Gulf to attract, engage, retain, and motivate a highly skilled workforce that focuses on the customers' interests.

Q. Are you sponsoring any rebuttal exhibits?

A. Yes. I am sponsoring Exhibit JMG-2, Schedules 1 and 2. The information contained in the schedules is true and correct to the best of my knowledge and belief.

- Schedule 1, Aon Hewitt Preliminary 2017 ASC 715-30 Tax-Qualified Pension Benefit Cost for Gulf Power Company
- Schedule 2, Gulf Power Tax-Qualified Pension Plan Scenarios

I. ANNUAL AND LONG-TERM AT-RISK COMPENSATION

Q. Do you agree with Witness Ramas's proposal to disallow $14,191,000 of Gulf's O&M expense for at-risk compensation in the 2017 test year?

A. No, I do not, for a number of reasons. Foremost, Witness Ramas's recommendation is fundamentally flawed because she seeks to disallow a substantial portion of Gulf's compensation expense despite the fact that Gulf's compensation expense is already below the median of the market. If the Commission were to disallow the expenses as she suggests, Gulf's compensation expense would be unfairly reduced significantly below the median of the market. Witness Ramas's proposal is not based on any market analysis or supporting data. Instead, her proposal focuses merely on the mechanism of pay, and how that mechanism should be treated in accordance with her personal beliefs. By ignoring the fact that the compensation expense Gulf requests in this case is market-competitive, she disregards best practice in compensation program design and management

and exhibits a lack of understanding of how at-risk pay goals are used to drive employee behavior in ways that benefit our customers. Gulf's total compensation plan aligns employees' interests with customers' interests and is set at a reasonable, middle of the market amount.

In addition, I note that Gulf Witness Deason explains in detail a number of additional objections to Witness Ramas's proposal related to Commission policy and precedent. In this regard, Mr. Deason importantly points out that in Gulf's 2012 test year rate case, the Commission appropriately allowed all of Gulf's annual at-risk compensation expense in recognition that customers benefit from a financially healthy utility.

Q. Does Witness Ramas present any evidence that Gulf's total compensation costs are unnecessary or unreasonable or that the Company's total compensation program is not properly designed or competitive?

A. No, she does not. Witness Ramas does not contest the reasonableness of the total expense requested for compensation or the design and competitiveness of the program. She instead focuses on the mechanism that triggers payment. Relying on her own opinion, Witness Ramas argues that some portion of Gulf's (necessary and reasonable) total compensation should not be allowed for recovery through rates because it is at-risk and tied to the financial performance of Gulf's parent company, Southern Company.

Q. Do you agree with Witness Ramas's opinion?

A. No. The combination of operational and financial goals tied to the at-risk portion of Gulf's total compensation plan is vital to the interests of our customers. It is important for our customers that Gulf's total compensation plan includes financial goals in addition to operational goals.

Q. Why is it important to your customers that Gulf employees have compensation goals that include both financial and operational components?

A. Our customers need safe and reliable service that is provided in the most cost efficient manner. A compensation plan that contained only operational goals might inappropriately drive employees to use more financial resources than necessary to achieve operational success. Similarly, a compensation plan that contained only financial goals might inappropriately drive employees to make decisions that sacrifice operational success for financial results. Witness Ramas's suggestion that the operational components should be separated from financial components and short-term goals from long-term goals is not in keeping with best practice of a well-designed compensation plan.

Q. Is the design and competitiveness of Gulf's total compensation program aligned with the external market and are the costs necessary and reasonable?

A. Yes. As previously demonstrated in my direct testimony, Gulf's total compensation of base pay and at-risk pay is managed to the median or

middle of the external market and is designed using sound compensation practice and principles. Through the use of compensation surveys published by recognized third-party sources, we determine the median total target compensation for each job. Based on the market, a portion of total target compensation is subtracted and allocated to at-risk pay focused on goals that benefit our customers. As illustrated in Exhibit JMG-1, Schedule 2 of my direct testimony, when assessing both our base pay and total compensation of base pay and at-risk pay, Gulf is slightly below the median of the market.

In addition, Gulf had Willis Towers Watson, a nationally recognized compensation and benefits firm, conduct a competitive assessment of the design of its total compensation program relative to external market prices. As shown in Exhibit JMG-1, Schedule 3 of my direct testimony, Willis Towers Watson's conclusion is that Gulf's compensation plans, programs, and processes are comparable to and competitive with the utility industry.

Q. Witness Ramas contends that Gulf's compensation plan design includes financial components that do not provide any benefit to customers. Do you agree?

A. No. By balancing both operational measures and financial measures in the at-risk pay plan, employees are driven not only to serve the customer by delivering safe and reliable service, but also to continue efforts to manage costs appropriately so that customers benefit from both excellent service and cost-effective management of the Company's resources. Customers

benefit from employee efforts to set and work within budgets that improve efficiency and reduce costs, ultimately resulting in lower customer rates than would otherwise be the case.

Q. Regarding Gulf's annual at-risk program, in which every Gulf employee participates, Witness Ramas suggests that shareholders, not customers, should bear the costs attributed to the financial goal tied to Southern Company earnings per share. Is she right?

A. No. Witness Ramas is very wrong. As noted earlier, she is suggesting that a large portion of compensation expense be disallowed even though the Commission appropriately recognized that this expense was properly recovered in rates in Gulf's 2012 test year rate case. Addressing the financial goal tied to Gulf's parent company, the Commission specifically noted that customers benefit from a financially healthy utility.

Regardless of the particular goals in the annual at-risk plan, the compensation sought by Gulf is below the median of the market. Witness Ramas is basing her entire argument on singling out one of the goals that employees must meet to achieve market pay. In the case of the annual at-risk plan, she seeks to have one-third of the at-risk portion of compensation removed from rates merely because a goal of the program is tied to a financial metric that refers to Gulf's parent company. She presents no evidence that this goal harms a Gulf customer in any way. To the contrary, Gulf customers benefit when Gulf employees are motivated to manage the Company's money wisely as a part of a balanced compensation plan. In

any event, her focus on one goal in the program is misplaced because the relevant question is whether the requested compensation is a reasonable cost of service for providing electric service to Gulf's customers. Nothing in Witness Ramas's testimony contradicts that the pay Gulf is requesting in base rates is reasonable in amount and reasonable as to its design.

Q. Witness Ramas suggests that the entire portion of Gulf's compensation expense associated with Gulf's long-term at-risk plan, $3,798,000, should also be disallowed because the goals in that program are tied to Southern Company. Mr. Garvie, why is it appropriate for the long-term portion of at-risk compensation to focus on Southern Company financial performance?

A. Foremost, the requested compensation expense is below the median of the market. Witness Ramas's suggestion that the entirety of the long-term compensation program be disallowed merely because the goals of the long-term at-risk program are tied to Southern Company demonstrates her unfamiliarity with sound compensation program design and her disregard of the benefits that such motivational goals bring to Gulf's customers. The compensation plan appropriately ties long-term goals to Southern Company financial performance for many reasons, each of which help our customers.

One such reason is to motivate employees to act like owners of the company so that when they make management decisions with long-term impacts, they do so with long-term operational and financial considerations in mind. Through equity ownership they are invested in the business and

the long-term success of Southern Company, which directly benefits the customers of Gulf Power Company.

Q. What is the logic of having a Southern Company financial goal as one of the goals that Gulf employees need to meet to secure their at-risk compensation?

A. Fifty-three percent of Gulf's capital provided by investors is equity capital. Gulf is a wholly-owned subsidiary of Southern Company. Gulf's access to the equity capital market is solely through its parent company, the Southern Company. Whether Gulf will be able to continue to provide reliable service to its customers at reasonable rates depends in part on the continued financial integrity of the Southern Company and its access to external equity investors. Therefore, employing Southern Company metrics in Gulf's at-risk compensation plan, in addition to operational goals, simply reflects the importance to Gulf's customers of the Southern Company being able to raise capital for Gulf's customers' benefit.

Q. In what other ways do Gulf's customers benefit from a goal tied to the Southern Company?

A. In addition to access to capital to fund projects that benefit Gulf's customers, Gulf's customers benefit from Gulf's relationship with Southern because it allows Gulf ready access to specialized expertise and savings from economies of scale. For example, due to the scale of Southern Company, Southern is able to negotiate lower contracts for many needed vendors and consultants that provide technical guidance and expertise to

Gulf. Similarly, customers benefit through cost savings on large purchases that are made possible due to Southern's bulk purchasing leverage. As addressed by Gulf Witness Hodnett in more detail, as a consequence of Gulf's relationship with Southern, Gulf has access, with no profit markup, to a myriad of specialized expertise that otherwise would be more costly to Gulf, either through having to pay more for third-party expertise that would necessarily include a profit mark-up or through having to hire more employees. The benefits Gulf receives from Southern are immense; motivational goals in the compensation plan that serve to keep Southern's financial integrity intact greatly benefit Gulf's customers.

Witness Ramas fails to recognize any of the benefits that Gulf's customers receive through Southern Company. She does not provide any evidence that including long-term financial goals as a part of a well-balanced compensation plan harms customers in any way. To the contrary, these financial goals benefit the customer. A total compensation plan without any long-term financial goals would not be in our customers' best interests. By designing the at-risk portion of the total compensation plan to include both annual goals and longer-term goals, an appropriate balance is achieved whereby employees are driven to deliver safe and reliable electric service to our customers in a manner that is economically efficient for our customers both now and in the years that follow.

Q. When you said earlier that Gulf's total compensation, which includes both base and at-risk pay, is appropriately market competitive and managed to

the median of the external market, was the long-term portion of the at-risk pay plan included as a part of this analysis?

A. Yes. The amount of compensation sought in this rate case attributable to the long-term portion of at-risk compensation is only that amount required by Gulf to remain market competitive. Again, Witness Ramas does not contest the reasonableness of the total expense requested for long-term compensation, but instead she focuses on the mechanism that determines payment. If Witness Ramas's proposal is accepted, the total compensation of base pay and at-risk pay for the 30 employees in the plan would no longer be at the median of the external market, as stated in my direct testimony. To the contrary, the total compensation for this group of employees would be 22 percent below the external market median, which would put total compensation well below the market and not competitive with peers. To continue to provide market median compensation, Gulf would have to consider completely redesigning its compensation program such that the current program of base pay plus at-risk pay is eliminated in favor of a base pay only model. Gulf could conceivably request the same dollar amount of compensation expense for the 2017 test year as it currently seeks so as to remain market competitive from a dollar standpoint, avoiding Witness Ramas's argument that a portion of the compensation program should be disallowed in rates simply because it includes financial goals. However, increasing base pay and eliminating at-risk pay that through goals provide a focus on our customers both operationally and financially, is simply not in the best interests of customers. It would result in higher fixed costs and poor alignment of interests with customers.

Q. Mr. Garvie, how do you respond to Witness Ramas's argument that since Gulf has reduced the number of participants in the long-term at-risk pay plan, the Company does not view a significant reduction in participants as negatively impacting the ability to hire and retain employees?

A. Witness Ramas again demonstrates her failure to understand sound compensation program design and management. As noted in my direct testimony, beginning in 2017, we are reducing the number of participants in the plan from over 100 to 30 to better align with the market as noted in the audit of our compensation program by Willis Towers Watson. To ensure that the total compensation for those removed from the plan remains at the median of the external market, it was necessary to increase their base pay to replace the portion of their total compensation which previously had been allocated to long-term at-risk pay. If base pay had not been increased, the total compensation of this group of employees would have been well below the market and created potential retention issues.

Notably, in order to remain market competitive, we continue to carve out a long-term at-risk portion of compensation for the remaining employees in the long-term plan. Our compensation plan is designed to the middle of the market. Gulf reduced the number of participants in the long-term plan in response to our consultant's market-based recommendation. The same consultant has not recommended that we reduce participation in the long-term plan any further. Gulf would not be market-competitive if it eliminated its long-term compensation plan.

Q. Witness Ramas argues that the relevant issue on the long-term at-risk pay plan is who should bear the cost burden of the plan expense – the shareholders or the rate payers. Do you agree?

A. No. In a base rate regulatory proceeding, the relevant issue is whether Gulf's total compensation expense of base pay and at-risk pay is reasonable and necessary. Witness Ramas has not provided any argument based on supporting data or analysis that Gulf's requested expense is unreasonable or unnecessary. Instead, her argument, also lacking in supporting data or analysis, is that some portion of at-risk pay should be disallowed based on goals within the pay program that motivate employees to wisely manage the Company's money both in the short and longer term.

My testimony has outlined how Gulf's total compensation program, including annual and long-term at-risk pay, is the best method for Gulf's customers because it allows Gulf to retain and attract qualified employees at market competitive compensation amounts, while allowing management to drive employee behavior so that employees continually keep the customers' interests at the center of their attention, serving the customers both in the short term and in the years to come.

Q. Witness Ramas also contends that short-term at-risk pay expenses for the 2017 test year should be reduced to the level associated with a "100 percent" performance level and not the "133 percent" performance level on which Gulf budgeted its short-term at-risk pay. Do you agree?

A. No, I do not agree. The expense requested for short-term at-risk pay is the amount needed to remain market competitive. The expense that Gulf is requesting is reasonable. The "100 percent" performance level is a function of the particular goal calibration for the short-term at-risk plan and does not reflect market median pay. If Gulf limited its payout to 100 percent for the short-term goals, Gulf's employees' payout would be below market.

Q. Would a 133 percent performance level for Gulf's short-term at-risk plan be within the market median?

A. Yes. Gulf's compensation is managed to the median of the external market with multiple checks throughout the process. Using multiple compensation surveys published by recognized third party sources, Gulf is assured that both the base pay and at-risk pay components of its total compensation plan are at the median of the market. As demonstrated by the audit performed by third party expert Willis Towers Watson, attached as Exhibit JMG-1 to my direct testimony, Gulf's compensation pay philosophy of targeting the 50th percentile is the prevalent practice across the utility industry; our pay benchmarking process is consistent with industry market best practices; our pay levels are competitive with market 50th percentile for base and at-risk compensation; our use of both annual and long-term at-risk pay components is comparable to industry peers; and our processes overall are confirmed to be competitive with industry peers. Witness Ramas's claim that any performance level over "100 percent" of our calibrated goal achievement would be above market is simply wrong. The compensation Gulf seeks is a reasonable and necessary expense.

Q. What benefits do Gulf's customers receive from the level of compensation that Gulf seeks in this case?

A. Simply put, Gulf is setting above average (top quartile) goals and paying employees market median compensation for reaching these goals. The goals drive employee behavior to achieve top operational performance and maintain a financially sound utility for compensation that is at the median of the market; this is a great deal for the customer. Gulf's compensation expense should be included as a necessary and reasonable expense.

II. SUPPLEMENTAL PENSION PLAN

Q. In her testimony, Witness Ramas proposes that the supplemental executive retirement plan expense be disallowed. Please describe the supplemental plans.

A. The Supplemental Benefit Plan (SBP) and Supplemental Executive Retirement Plan (SERP) were established to provide participants total retirement income benefits from company-sponsored sources, comparable to what other employees receive as a percent of base salary plus annual at-risk pay. The SERP has since been frozen with no new participants added after January 1, 2016.

Q. Why does Gulf provide these types of plans?

A. Gulf provides these plans due to limitations imposed by the Internal Revenue Code (IRC) on the deductibility of benefits associated with annual

compensation levels over $265,000. This annual compensation limitation exists solely for government revenue and tax policy purposes and has nothing to do with the level of benefits that should be provided.

Q. Are these plans intended to provide additional or greater benefits than other employees receive under the general pension plan of the Company?

A. No. The intent of these plans is to provide equivalent benefits (as a percentage of pay) across our employee population.

Q. How do you respond to Witness Ramas's argument that these pension costs are additional benefits that the Company has decided to provide that exceed IRS limitations and therefore are not necessary for the provision of utility service?

A. I disagree. Contrary to Witness Ramas's unsupported statement, the amounts needed to fund these retirement plans are in fact necessary for the provision of utility service. A company of Gulf's size and scope cannot operate effectively without experienced and qualified employees to lead and manage the organization. Gulf has a responsibility to deliver safe and reliable electric service to the hundreds of thousands of its customers in Northwest Florida. I do not think there can be any valid dispute that in order to carry out this responsibility, Gulf needs to be able to attract and retain individuals who are able to effectively lead and direct its employees. Customers benefit from the efforts of the leaders of the Company. In order to remain competitive, Gulf must be able to offer these employees competitive retirement benefits commensurate with their compensation.

Q. Do you agree with Witness Ramas's basis for her proposed disallowance?

A. No. The supplemental benefit plans are intended to provide fair and equitable benefits to all Gulf employees at all levels. They are reasonable and appropriate expenses that allow Gulf to provide benefits to employees at competitive levels. As such, these expenses should be included in base rates.

III. PENSION EXPENSE AND CONTRIBUTION

Q. Witness Ramas proposes to remove the ratemaking effects of the planned 2016 pension contribution discussed in your direct testimony unless Gulf demonstrates that the contribution was made and was cost effective for the company. Did Gulf make a pension contribution in 2016?

A. Yes, Gulf made a contribution to the pension plan in December 2016. The amount of the contribution was $55,816,000, consisting of $48,000,000 for Gulf and $7,816,000 as an allocation from SCS. The contribution was less than the projected amount as of the time I prepared my initial testimony in this case.

Gulf Witness Ritenour addresses the appropriate ratemaking adjustments to reflect this lower contribution level.

Q. Why was the actual pension contribution less than what was previously projected?

A. The original $81,000,000 contribution was prepared by the pension plan actuary, Aon Hewitt, based upon the assumptions as of the July 2016 measurement date. This amount was the estimated contribution needed to improve the pension plan's funded status to the desired target and to avoid Pension Benefit Guaranty Corporation (PBGC) variable-rate premiums. As noted in Exhibit JMG-2, Schedule 1, the discount rates increased from the date of the original estimated $81 million contribution. Prior to making the actual contribution of $55,816,000, the pension plan actuary provided updated information which reflected the most recent discount rate and assumption information available in mid-December. The discount rate used for preliminary December 31, 2016 disclosure is very close to the rate used for determining the actual $55,816,000 contribution made in December. As noted in the pension plan actuary's letter dated January 24, 2017, this contribution improved the funded status of the pension plan to 99 percent as of December 31, 2016.

Q. Was the December 2016 pension contribution cost effective for Gulf and its customers?

A. Yes. The contribution resulted in a revenue requirements savings of $100,000 for the 2017 test year and a $3,800,000 Net Present Value (NPV) over the next 10 years as seen in Exhibit JMG-2, Schedule 2. As noted in the attached letter dated January 24, 2017 from our pension actuary, the December 2016 contribution of $55,816,000 improved the funded status of

the plan to a preliminary value of 99 percent that had the following positive impacts:

1. Reduced the 2017 pension expense by $3,860,000 from what it otherwise would have been had there been no contribution.
2. Eliminated projected PBGC variable-rate premiums which otherwise would have been incurred based on the funded status of the plan, with estimated savings of over $6,000,000 over a 10-year period.
3. Eliminated projected future minimum required contributions for the next 10 years.

Q. In her testimony, Witness Ramas recommends that the Company provide the current estimate of the 2017 pension expense (or income, if applicable). Is this information available?

A. A copy of the most recent information provided by the pension actuary is attached based on preliminary December 31, 2016 disclosure results. As noted on page 2 of the letter dated January 24, 2017, the preliminary results reflect the most recent actuarial assumptions (discount rate, mortality, etc.)

Q. Witness Ramas states that pension expense in the filing is a negative amount which is indicative of pension income and implies that a large contribution to the plan was not needed. Is this accurate?

A. No. As previously noted, the contribution resulted in reduced costs to our customers. The $55,816,000 contribution made in December improved the funded status of the pension plan and eliminated future PBGC variable-rate premiums which would have been an added cost to the pension plan. The

2017 pension expense decreased $3,860,000 from what it otherwise would have been as a result of the contribution, which resulted in pension income (i.e. negative pension expense) projected for the 2017 test year. Both in the 2017 test year and overall for a projected 10-year period, the contribution reduced revenue requirements; therefore, it provided customers savings in the amounts of $100,000 for the 2017 test year and a $3,800,000 Net Present Value (NPV) over the next 10 years.

Q. When it filed this case, how was the Company able to determine the pension expense for the 2017 test year when the discount rate and other actuarial assumptions would not be known until the end of 2016 as Witness Ramas contends in her testimony?

A. The pension expense for the 2017 test year was determined using a discount rate and other actuarial assumptions available at the time of our original testimony. We have provided a letter dated January 24, 2017, from the pension plan actuary summarizing preliminary December 31, 2016, results using the updated 2017 test year discount rate and other actuarial assumptions. As noted above, the December 2016 pension contribution saved money for our customers.

IV. OTHER EMPLOYEE BENEFITS

Q. Please address Witness Ramas's suggestion that the expenses under the category of Other Employee Benefits should be reduced by $268,432 to reflect the 2015 actual expense level of $461,749.

A. Witness Ramas's recommendation that Gulf not be allowed the additional amount needed to cover these expenses for the 2017 test year should be rejected. Her stated ground for disallowing the expenses is that Gulf "has not supported" the increase in expense when comparing 2015 actual to the 2017 projection. However, Witness Ramas's claim is belied by Attachment 5 to her testimony, Gulf's Response to Citizens' First Set of Interrogatories Item No. 13(d), wherein the reasons for the cost increases are identified. The actual expenses for Other Employee Benefits in 2015 were less than the projected amounts for 2017 due to multiple factors. One such factor is the addition of a Functional Movement wellness program. This new wellness program involves employees participating in a "prehab" where at risk movement patterns are identified and corrected through daily corrective movement sessions. The purpose of the program is to enable employees to move with biomechanical efficiency, increasing performance, reducing injuries, and enhancing career longevity. Expenses under Other Compensation Benefits also necessarily increased due to Gulf having additional employees reaching service milestones in 2017, requiring an increase in the budget for Service Awards. An increase in the projected prime rate called for an increased expense for Interest on Deferred Compensation. The final category of Other Compensation Benefits, which

Gulf budgeted under the "Meals and Travel" accounting line item, included budgeting for meals related to Company-wide and smaller business unit gatherings to foster teamwork and the engagement of employees. "Other" employee benefits such as wellness programs, service awards, and employee gathering events should not be dismissed as unimportant, as they are cost-effective ways to increase the health and morale of the workforce. Witness Ramas's claim that these expenses are "not supported" is wrong.

V. CONCLUSION

Q. Does Witness Ramas provide any evidence to challenge the overall reasonableness of Gulf's total compensation and benefits package?

A. No, she does not. She has not provided any evidence that the costs of Gulf's compensation and benefit programs are unnecessary or unreasonable. Instead she proposes to disallow a portion of compensation simply because she disagrees with the manner in which it is paid. Gulf's projected expenses for the at-risk portion of total compensation, supplemental retirement benefits, and pension expenses are reasonable and appropriately included in rates.

Q. Does this conclude your rebuttal testimony?

A. Yes.

GULF POWER COMPANY

Before the Florida Public Service Commission
Rebuttal Testimony of
Susan D. Ritenour
Docket No. 160186-EI
In Support of Rate Relief
Date of Filing: February 8, 2017

Q. Please state your name, business address and occupation.

A. My name is Susan Ritenour. My business address is One Energy Place, Pensacola, Florida 32520. I am the Corporate Secretary, Treasurer and Corporate Planning Manager for Gulf Power Company (Gulf or the Company).

Q. Have you previously filed testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to explain why the Commission should reject the adjustment proposed by Office of Public Counsel (OPC) Witness Ramas to disallow a number of necessary and valuable employees included in the 2017 test year. I also point out the errors in her calculations. I discuss the actual pension funding made by Gulf in December of 2016 and provide the impact on the requested rate base and operating expenses. Finally, I provide information regarding the Company's Smart Energy Center.

Q. Are you sponsoring any rebuttal exhibits?

A. Yes. I am sponsoring Exhibit SDR-2 consisting of Schedules 1 through 3. Exhibit SDR-2 was prepared under my supervision and direction, and the information contained in the exhibit is true and correct to the best of my knowledge and belief.

Q. Do you agree with Ms. Ramas's adjustment to reduce the number of employees included in Gulf's 2017 test year request?

A. No, I do not. There are several flaws in the arguments put forth by Ms. Ramas in her attempt to justify disallowance of employees that are essential to providing safe and reliable electric service for our customers, which I will describe in my testimony.

Q. Do you have any concerns about the number of positions that Ms. Ramas recommends be disallowed?

A. Yes. Ms. Ramas calculates her disallowance by simply comparing actual September 2016 employees (1,357) to budgeted employees for that month (1,477) to derive a variance of 120 employees. She then proceeds to reduce Gulf's requested O&M expense, which is based on 1,450 employees, by her calculated impact of these 120 employees. The result is that she proposes 1,330 employees (1,450 less the 120 adjustment) be included in Gulf's 2017 test year for ratemaking purposes. This is 27 employees less than Gulf actually employed in September 2016, the month she used for her adjustment. It is illogical and inconsistent to calculate a variance based on 1,477 budgeted employees and apply this variance as

an adjustment to a requested level of 1,450 employees in the test year. This error alone overstates Ms. Ramas's adjustment to payroll and benefit expenses by $2 million, which impacts revenue requirements by $2 million. Although I do not agree with her recommendation to disallow any employees, the comparison of September 2016 actual employees (1,357) to the 2017 test year requested level (1,450) yields a difference of 93 employees, not 120.

Q. Ms. Ramas argues that her reduction in labor costs does not result in a double-counting of the hiring lag adjustment. Do you agree?

A. Absolutely not. Again, her logic is flawed. As I stated in my direct testimony, even if Gulf makes every effort to fill all employee positions, there are employee positions that will be temporarily unfilled due to employee turnover – transfers to other positions, retirements, separation from the Company, etc. This is true in any business, not just at Gulf. Consistent with this fact, the actual number of employees in September 2016, which Ms. Ramas used in calculating her adjustment, includes positions that are in this normal, expected state of being vacant. Her calculation, although erroneous, of 120 vacancies most certainly takes into account vacancies that are the result of normal turnover. Making a hiring lag adjustment in addition to the adjustment to remove all vacancies as of a certain point in time results in a double-counting of the impact of this normal turnover.

Q. Do you agree with the average salary used by Ms. Ramas to calculate the impact of her recommended disallowance of employees?

A. No. Ms. Ramas calculated an average salary using base payroll included in O&M divided by the 1,450 employees included in the 2017 test year. She incorrectly assumes that the salaries associated with the vacancies she has identified are consistent with total company average salaries charged to O&M expense. As I discussed previously, the correct number of employees representing the difference between September 2016 actual and the 2017 test year is 93. The average salary charged to O&M of these 93 specific employees is $51,146 as compared to Ms. Ramas's calculation of $55,435. Besides being overstated for the difference between 120 and 93 employees as I discussed previously, Ms. Ramas's quantification of the O&M costs associated with these employees is overstated. While I disagree with the appropriateness of Ms. Ramas's adjustment, using the more accurate average salary of $51,146 and the correct number of vacancies of 93, Ms. Ramas's adjustment should be decreased by $400,000 [($55,435 - $51,146) x 93]. A total of $2.4 million (this $400,000 plus the $2 million I described earlier) should be removed from Ms. Ramas's adjustment for the "removal of vacant positions" simply due to her erroneous assertions on the number of vacancies and the average salary associated with them.

Q. Besides the logic errors described above, do you have any other concerns with Ms. Ramas's disallowance of employee positions?

A. Yes, I do. I am very concerned that Ms. Ramas fails to consider that there are valid explanations for the difference between the number of actual

employees at a point in time in 2016 and the number of employees requested in the 2017 test year. First, since September 2016, five positions have already been filled. Also, eight line service and customer service positions have been vacant because Gulf routinely fills these jobs as a group in order to efficiently and productively train these individuals; these eight will be on board and beginning training classes in February or March. In addition to these 13 positions that are or will be filled in the next few weeks, another 11 positions have been approved and are in the process of being filled.

Another reason for the difference in September 2016 actual employees and the 2017 test year request relates to an organizational change planned for the security function at Gulf's Plant Crist. The 2017 test year number of employees includes an additional 16 positions required to replace security contractors with Gulf employees to provide security at Plant Crist. Previously, the related security costs were budgeted and incurred as contractor expense in O&M. In the 2017 test year, the costs associated with this security function are included as employee salaries and benefits in O&M expense instead due to this planned organizational change. Since the 2017 test year does not include the cost of the contractors that have been used to provide security at Plant Crist, the effect of removing these 16 positions would be to remove all costs associated with this vital security function at our largest generating plant.

An additional eight positions in the power delivery area were vacant due to timing in order to either fill a 2017 apprentice class or to hire cooperative engineering students when they have completed their educational programs. In order to meet our need for skilled line workers and proficient engineers, Gulf utilizes apprentice and cooperative programs. Such positions are sometimes temporarily vacant due to the business need to hire apprentices as a group to facilitate training, or due to the timing of educational requirements of cooperative engineering students.

Finally, there are 45 positions that have not yet been filled due to resource constraints. Seventeen of these positions are being backfilled by contractors, overtime and SCS employees. Thus, Gulf continues to incur the expenses of accomplishing the responsibilities of these positions. The remaining positions are vacant in an effort to manage the financial resources available to the Company. As Gulf Witness Liu testifies in her rebuttal testimony, Gulf's management must constantly make decisions regarding the best use of all of the Company's resources to serve customers. These decisions are more challenging when the costs of needed positions are not included in the revenues received from customers. Further, during the period covered by the 2013 Stipulation and Settlement Agreement (the Settlement) in Docket No. 130140-EI, Gulf made concerted efforts to control costs in order to avoid the need for an increase in base rates prior to July 1, 2017, efforts that included holding positions vacant for some period of time. As a result, several positions remained vacant during the Settlement period. This is simply not a situation that can be sustained

over time while still maintaining the level of service and reliability our customers expect and deserve.

Schedule 1 of my Exhibit SDR-2 summarizes the information I've described in my testimony related to the difference of 93 employees between September 2016 actual employees of 1,357 and 2017 test year employees of 1,450.

Q. In her testimony, Ms. Ramas recommends the removal of working capital and O&M expense adjustments related to Gulf's additional pension plan funding. Is this appropriate?

A. No. In his rebuttal testimony, Gulf Witness Garvie explains why the additional pension funding is necessary and appropriate, and supports the actual amounts of additional funding and the associated O&M expense impacts. As Mr. Garvie explains, the actual funding was done in December 2016 and was less than Gulf's estimate at the time our rate case filing was prepared. The actual funding totaled $55,816,000 instead of the $81,000,000 we projected.

Because of the reduction in funding, the rate base adjustments that I made in my direct testimony and exhibits should be revised and Gulf's requested rate base should be decreased by $25,184,000 ($24,498,000 on a jurisdictional basis). In addition, the O&M adjustment associated with pension expense made in the filing, a decrease of $665,000, should be revised to be a decrease of $880,000. This change serves to decrease

requested O&M by $215,000 ($212,000 on a jurisdictional basis). The calculation of these amounts is shown on Schedule 2 of my rebuttal exhibit. The impact of these revised adjustments is to reduce Gulf's revenue requirement by $2.4 million.

Q. Please comment on Ms. Ramas's adjustments related to the Smart Energy Center.

A. After the MFRs were filed, the Company decided not to construct the Smart Energy Center (SEC) during the 2017 test year and for that reason an adjustment is appropriate. However, Ms. Ramas's adjustments are not correct, and she understates the impact on the test year of the SEC by incorrectly assuming that the SEC was projected to be placed in service in December 2017. The in-service date for this project as reflected in the test year was June 2017. Schedule 3 of my rebuttal exhibit provides the correct amount of the CWIP, plant-in-service, accumulated depreciation and depreciation expense that should be removed from Gulf's 2017 test year related to the SEC. The total impact on rate base is a reduction of $3,181,000 ($3,126,000 on a jurisdictional basis) along with a reduction to depreciation expense of $42,000 ($41,000 on a jurisdictional basis). The revenue requirement impact of removing the SEC is a reduction of $322,000, which is $100,000 more than the impact of the adjustments as quantified by Ms. Ramas.

Q. Do you have any other observations on Ms. Ramas's testimony?

A. Yes. Ms. Ramas makes a number of adjustments, such as those related to maintenance outage investment, that selectively seek to update assumptions or reflect actual data that became available following the filing of Gulf's rate case based on the 2017 test year. She ignores the fact that in the months following the preparation and filing of the case, assumptions and inputs may have changed. For example, as noted in the direct testimony of Gulf Witness Park, Gulf's updated forecast of base rate revenues is $5.7 million less than the revenues included in the 2017 test year as filed. It is inappropriate to consider only those adjustments that reduce Gulf's requested rate increase and disregard other known changes that would increase Gulf's requested rate increase.

Q. Ms. Ritenour, does this conclude your testimony?

A. Yes.

GULF POWER COMPANY

Before the Florida Public Service Commission
Rebuttal Testimony of
Janet J. Hodnett
Docket No. 160186-EI
In Support of Rate Relief
Date of Filing: February 8, 2017

Q. Please state your name, business address, and occupation.

A. My name is Jan Hodnett. My business address is One Energy Place, Pensacola, Florida, 32520. I am the Comptroller of Gulf Power Company (Gulf or the Company).

Q. Have you previously filed testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. My rebuttal testimony responds to certain assertions and positions contained in the testimonies of Office of Public Counsel (OPC) Witnesses Ramas and McCullar. My rebuttal testimony addresses, in the order listed, the following areas discussed by these witnesses:

- Property Damage Reserve Accrual
- SCS Allocations
- Accounting for the Sale of the Pace Boulevard Office

Q. Are you sponsoring any rebuttal exhibits?

A. Yes. I am sponsoring rebuttal Exhibit JJH-2. Exhibit JJH-2 was prepared

under my direction and control, and the information contained therein is true and correct to the best of my knowledge and belief.

I. PROPERTY DAMAGE RESERVE ACCRUAL

Q. Please summarize what Witness Ramas suggests in regard to the annual accrual to Gulf's property damage reserve.

A. Witness Ramas suggests that the annual accrual remain at the amount set over 20 years ago in 1996, $3.5 million. Her rationale is that even though the amount of funds in the reserve is still below the target amount set by the Commission in Gulf's 2012 test year rate case, the reserve level has nevertheless increased over the last few years because Gulf has not recently sustained large storm losses. Instead, Witness Ramas suggests that when a major storm event occurs, Gulf's customers be required to pay a surcharge to cover such losses.

Q. Do you agree with Witness Ramas's position?

A. No. Witness Ramas completely ignores the 2016 Storm Study filed with the Commission on April 8, 2016, pursuant to the requirement in Commission Rule 25-6.0143 (1)(l) to file a Storm Damage Self-Insurance Reserve Study (Storm Study) at least once every five years. The 2016 Storm Study concluded that the total annual reserve obligation required by Gulf, based on the expected annual, uninsured damage to Gulf's transmission and distribution system from hurricanes, is $7.9 million. Because the Storm

Study does not include expected losses from non-hurricane events, the annual accrual should also include an amount to account for these other types of losses, as I discuss in my direct testimony.

It is not in our customers' interests to be overly dependent on surcharges. An appropriate annual property damage reserve accrual will lessen the likelihood of any surcharge being imposed. When one is absolutely necessary, an appropriate annual property damage reserve accrual will lessen the amount of any surcharge and, thus, the burden imposed on customers when they can least afford it. While an appropriate annual property damage reserve accrual may slightly increase rates, it can and will provide greater benefits to customers when they need it the most.

It is my understanding that the Commission established and authorized the property damage reserve after Hurricane Andrew in 1992, a catastrophic event which effectively eliminated the availability of cost-effective insurance for these types of losses. The annual accrual in some sense replaces the insurance premiums that previously would have been paid to help address such losses. Our customers benefit far more from an annual accrual to the reserve, where the amount of the accrual is grounded in the results from an approved Storm Study, than from a larger surcharge in the wake of the inevitable hurricane strike. Such surcharges would be implemented at a time when our customers are dealing with their personal losses from a storm.

Q. Because Witness Ramas does not base her recommendation on the Storm Study, what, if anything, does she cite to support her argument that the annual accrual should not increase even though Gulf still has not reached the bottom range of the targeted property reserve level?

A. Witness Ramas averaged annual charges to the reserve since 2006, the year immediately following Hurricane Katrina and Hurricane Dennis, and two years following Hurricane Ivan which devastated Northwest Florida, to support her argument that Gulf's reserve losses are expected to be only a little over $1 million per year. She takes the position that because the reserve is growing, albeit not at a rate that has allowed the reserve to reach even the bottom range of the targeted reserve, the annual accrual should remain the same, because customers can simply bear any deficiencies via bill surcharges in the event of a "major storm."

Q. What is wrong with Witness Ramas's position?

A. Witness Ramas's position is fundamentally flawed for multiple reasons. First, in order to come up with her average of storm losses to the reserve, she selectively excluded the years in which there were significant hurricane events. Hurricane Ivan caused $141.5 million in total damage, Hurricane Dennis caused $59.4 million in total damage, and Hurricane Katrina caused $4.3 million in total damage. Putting aside temporarily that the purpose of the Storm Study is to objectively evaluate hurricane losses over a period of time to obtain a more realistic probability of hurricane damage, the fallacy of Witness Ramas's logic is that even though Gulf has been fortunate not to sustain a significant hurricane strike event over the last several years, the

current annual accrual of $3.5 million has not been sufficient to reach the Commission-established target reserve level. As I describe in my initial testimony, Gulf has sustained an average of over $1 million in annual losses charged to the reserve over the last several years due to events not covered by the Storm Study, such as floods, fires, and storms other than hurricanes. The question of the next hurricane event is one of "when," not "if." Witness Ramas's suggestion that the Commission ignore the required Storm Study should be soundly rejected by the Commission.

Q. In her testimony, on page 34, line 14, Witness Ramas was asked about the consequences of a "major storm" that would impact Gulf's system. She also states on page 34, lines 7-11, that the Commission's stated goal is that the reserve be sufficient to cover most, but not all, storms. Is the current reserve level adequate to cover all but "major storms"?

A. No. As Gulf Witness Harris describes in his direct testimony, the 2016 Storm Study concludes that the reserve is too small to pay for most hurricane damage. I will defer to Mr. Harris for the specifics, but he explains that the reserve would not even cover all Category 1 or Category 2 single storm event damages, much less those from a "major" hurricane of Category 3 or higher.

Q. What effect would increasing the annual accrual amount have on the potential for customer surcharges in the event of a loss?

A. As the amount of the annual accrual increases, the likelihood of having to impose customer surcharges decreases. Furthermore, relying on customer

surcharges when hurricanes occur assures intergenerational inequity. The property damage reserve is an accounting technique that provides a uniform and systematic means of matching costs to revenue recovery so that such costs will not be concentrated in a particular year. When customers receive service, they are not only receiving the electrons flowing through their meter, but also the reasonable expectation that their service will be restored as quickly and safely as possible should an interruption occur from a storm or other event. Since storms will occur and only their timing is uncertain, the cost of providing electric service should include an allowance for a level of restoration activity that approximates the expected annual storm costs. To a great extent, as I referenced earlier in this testimony, it is analogous to purchasing insurance coverage through a monthly premium. Even though a claim may not be filed, the premium is still a current cost of providing the service.

Q. Have Gulf's customers faced surcharges for hurricane-related damages in the past?

A. Yes. In 2005 and 2006, Gulf incurred hurricane damage that exhausted the then-existing property damage reserve. So when many of Gulf's customers were paying for repair of their own storm damage, they were required to pay a storm surcharge for Gulf's storm damage. The impact of a storm surcharge can be significant. Gulf's customers faced a surcharge of $2.71 for residential customers using 1,000 kWh per month from April 2005 through March 2006, followed by a surcharge of $2.57 for residential customers using 1,000 kWh per month from April 2006 through June 2009.

The total collected through surcharges over this 51-month period was more than $100 million.

Q. How do those historic Gulf hurricane surcharges compare to the monthly bill impact of Gulf's proposed increase in the property damage accrual?

A. The impact of the proposed property damage accrual would increase a residential bill by $0.49 for customers using 1,000 kWh per month.

Q. Does the inclusion of a property damage accrual in rates add to a utility's earnings?

A. No, it does not. It is an expense that is used exclusively to provide for future storm costs. It does add to a company's cash flow. However, Gulf has a partially-funded reserve, and the after-tax cash is deposited into the funded portion of the reserve.

Q. Does the reserve provide any benefit to Gulf's customers in addition to covering storm restoration costs?

A. Yes. The unfunded portion of the property damage reserve is treated as a reduction to rate base and therefore reduces rates.

Q. Another of Witness Ramas's arguments regarding continuance of the current property damage accrual is her belief that storm hardening efforts will reduce the expected storm damage. Has the Company included the impact of storm hardening in the calculation of its accrual?

A. Yes. As discussed in the direct testimony of Gulf Witnesses Smith and Harris, the Storm Study already assumes an estimated impact or reduction of loss of 1 percent due to storm hardening.

Q. Is any further adjustment warranted related to storm hardening?

A. No. As there has been no experience upon which to base a realistic assessment of how much storm damage costs savings might result, there is no basis for any further adjustment related to storm hardening.

Q. Did Witness Ramas consider all changes in circumstances in recommending no increase in the storm accrual?

A. No. She fails to recognize factors that are likely to increase costs charged to the reserve. Since the time the current accrual was set in 1996, there have been significant investments in transmission and distribution (T&D) plant. The cost of T&D investment back in 1996 was $479 million. The data used in Mr. Harris' 2016 Storm Study show an estimated replacement value of Gulf's overhead T&D plant to be $2.3 billion as of 2014. Based on net additions and retirements in T&D through 2016, the estimated replacement value increased to more than $2.5 billion. Additionally, as I discussed earlier, there are other types of property losses that are charged to the reserve which are not a part of the Storm Study. These factors show that the proposed annual accrual of $8.9 million is, in fact, a conservative estimate of what is actually needed to cover property damage losses.

Q. What annual accrual amount should the Commission approve to the property damage reserve?

A. As I stated in my direct testimony, the Commission should approve Gulf's proposed annual accrual of $8.9 million. This amount is based on an expected average annual hurricane loss charged to the reserve of $7.9 million and an additional $1 million related to non-hurricane damage losses.

II. SCS ALLOCATIONS

Q. What is OPC Witness Ramas's recommendation concerning the SCS allocation factors used in forecasting the SCS costs for the 2017 test year?

A. Witness Ramas is recommending a reduction to SCS test year expenses of $6,362,000.

Q. What is the basis for her recommendation?

A. Witness Ramas states that the allocation factors used in forecasting the SCS expenses to be allocated to Gulf for the 2017 test year did not consider the impact of several acquisitions by Southern Company in 2016.

Q. What are the acquisitions to which Witness Ramas is referring?

A. Witness Ramas is referring to Southern's merger with Southern Company Gas (formerly known as AGL Resources, Inc.), Southern's acquisition of PowerSecure, and Southern's acquisition of a 50 percent equity interest in the Southern Natural Gas pipeline.

Q. Do you agree that an adjustment should be made to the SCS test year expenses?

A. Yes, but the adjustment should be to reduce SCS test year expenses by $719,000, not $6,362,000.

Q. Why was an adjustment not included in the 2017 test year amounts when Gulf filed its case in October 2016?

A. Because the budget Gulf used for the 2017 test year was completed before the merger and acquisitions were finalized, the impact on the SCS allocations was not known when the case was prepared.

Q. Why is Witness Ramas's calculation of a $6,362,000 adjustment incorrect?

A. Witness Ramas assumes all allocated SCS expenses included in the 2017 test year will be impacted by changes in SCS allocators due to the merger and acquisitions. This assumption is false. Southern Company Gas has its own holding company and service company structure; thus, they do not need extensive services from SCS in some areas and would not be allocated a portion of the expenses in those areas. Moreover, many services provided by SCS support electric infrastructure activities and are not associated with gas activities. Only those costs that should be properly allocated to Southern Company Gas or PowerSecure would be changed.

Q. Please describe the process that was used by SCS to calculate the impact of the change in SCS allocation factors and SCS expense on Gulf's 2017 test year amount.

A. An analysis of the impact was prepared in January 2017 when the data became available. The costs of SCS are allocated to the companies served based on a set of specific allocators. With the acquisitions, the various statistics of the acquired companies (Southern Company Gas and PowerSecure) were added to develop the applicable allocators used to determine Gulf Power's share of costs. To determine the effect of the acquisitions, the SCS expenses allocated to Gulf Power were calculated with two different set of allocators: one set which was developed with the acquisitions in place and another set developed excluding the acquisitions. The difference between the two calculations is the effect of the acquisitions.

Q. How does the analysis account for the fact that the acquired companies are stand-alone firms with staff and systems already performing all the tasks normally performed by SCS and that some allocated costs are not applicable to Southern Company Gas or PowerSecure?

A. An integration team evaluated every allocated SCS Work Order and determined if it was appropriate for PowerSecure and Southern Company Gas to receive a portion of the costs.

Q. What are the overall results of the analysis of the incremental effect of the acquisitions on Gulf's SCS allocated costs for the 2017 test year?

A. The analysis estimated that the SCS expense allocated to Gulf for the 2017 test year would decrease by $719,000. Exhibit JJH-2 shows the breakdown of the amounts by SCS allocation factor for 2017.

Q. Are there any acquisitions not addressed by the revised allocation factor calculation?

A. Yes. Due to the timing of the acquisition of the 50 percent equity interest in the Southern Natural Gas pipeline, the calculation of the SCS allocation factors for this acquisition is not definitively known at this time. However, because this acquisition was of a 50 percent equity interest in a gas pipeline, the impact is expected to be insignificant to Gulf.

Q. What is Witness Ramas's recommendation concerning the SCS costs in the test year associated with Next Generation Nuclear Research & Development (R&D)?

A. Witness Ramas recommends that the SCS costs of $149,968 for next generation nuclear R&D be excluded from the test year.

Q. What is the basis for her recommendation?

A. Witness Ramas's rationale is based on Gulf Witness Burroughs' deposition where he indicated that there is no plan at this time for Gulf to build a nuclear facility.

Q. Do you agree with Witness Ramas's recommendation?

A. No. Research and development is a process intended to create new, improved, and diverse power generation options and requires long development cycles. R&D investments are required now to make these technologies available when needed by our customers. These R&D costs are shared appropriately among the operating companies and are

leveraged heavily by co-funding from the U.S. Department of Energy. Denying recovery of costs to create new and improved technology within the Southern generation fleet simply because Gulf does not have plans to build nuclear generation at this time is extremely short-sighted by Witness Ramas. In the long run, research and development of better, less expensive, and more efficient generation resources for Southern's generation fleet, which serves Gulf's customers, will benefit Gulf customers, regardless of the technology under examination. Therefore, it is appropriate that Gulf pay for its portion of these research and development activities.

III. ACCOUNTING FOR THE SALE OF THE PACE BOULEVARD OFFICE

Q. What is OPC Witness McCullar's recommendation concerning the Company's proposed future net salvage percent for Account 390, Structures and Improvements, in the Company's Depreciation Study?

A. Witness McCullar is recommending a 0 percent future net salvage percent for Account 390, compared to the Company's proposed -5 percent future net salvage percent for this account.

Q. What is the basis for her recommendation?

A. Witness McCullar states that the historic net salvage analysis for Account 390 excludes gross salvage received from the retirement of one of the assets included in this account.

Q. To what specific transaction is she referring?

A. The transaction is the Company's sale of the Pace Boulevard office in 2008, which occurred approximately nine years ago. Gulf recorded in October 2008 a gain on the sale of the office. Therefore, this transaction has no bearing on Gulf's current base rate case.

Q. Has this transaction been subject to Commission review since 2008?

A. Yes. It was initially captured in a surveillance report filed with the Commission in October 2008. Since then, Gulf has filed two base rate cases and two depreciation studies. No adjustments related to this transaction were made by the Commission to any of the filings.

Q. Do you agree with Witness McCullar's recommendation regarding the impact on the future net salvage percent for Account 390 as a result of this sale?

A. No. As I stated earlier, the retirement of the asset she is referring to was the sale of Gulf's Pace Boulevard office in 2008. In accordance with Accounting Standard Codification (ASC) 360, Property, Plant, and Equipment and FERC Electric Plant Instruction, Part 101, Paragraph 5F, the Company correctly recorded a gain on the sale of the asset, instead of recording salvage. The gain was recorded on the Company's books to Account 421.1, Gain on Disposition of Property, in accordance with FERC requirements. The accounting for the sale of the asset was reviewed and agreed to by Gulf's independent auditors, Deloitte & Touche.

Q. Witness McCullar states that she has reviewed the Company's FERC Form 1 for the year 2008 and that Account 421.1 shows $0 in the filing. Please explain why the amount is $0.

A. Accounting and regulatory guidance is often provided on how to report certain accounting transactions in a company's financial statements. SEC Staff Accounting Bulletin (SAB) 13B, requires that gains or losses from the sale of assets be reported as "other general expenses" pursuant to SEC Regulation S-X, Article 5-03(6). In other words, the gain or loss on the sale of an asset would be included within an expense line item in the operating section of a company's income statement, unless the gain or loss is material. If material, the gain or loss would be reported as a separate line item in the operating section of a company's income statement.

Since the gain on the sale of the Pace Boulevard office was not considered material to the Company's financial statements, the gain was netted with depreciation expense on page 114, line 6 of Gulf's 2008 FERC Form 1 filing. The reporting of the gain on the sale was reviewed and agreed to by Gulf's independent auditors, Deloitte & Touche.

Q. Was the gain on the sale recognized for the benefit of Gulf's customers?

A. Yes. Gulf's retail customers received the benefit of the gain in the October 2008 surveillance report.

Q. Witness McCullar states Gulf should have amortized the gain over a five-year period based on previous rulings from the Commission. What impact

would that have on Gulf's 2017 test year in light of the fact that this transaction occurred in 2008?

A. There would be no impact on Gulf's 2017 test year since the transaction occurred in 2008, approximately nine years ago. This transaction also has no impact on the net salvage percent for Account 390 in Gulf's Depreciation Study for this case since the Company properly recorded a gain on the sale instead of salvage.

Q. Does this conclude your testimony?

A. Yes.

ERRATA SHEET

Rebuttal Testimony of: Richard M. Markey
Date: March 1, 2017
Docket No. 160186-EI

PAGE	LINE	ERROR OR AMENDMENT	REASON FOR CHANGE
2	17	Change "66" to "65"	Page reference error
3	22	Change "conclusion drawn" to "recommendation"	Clarification
3	22	Change "63" to "66"	Page reference error
3	23	Change "prudency" to "exclusion"	Clarification
3	23	Add "from rate base" after the word "costs"	Clarification

GULF POWER COMPANY

Before the Florida Public Service Commission
Rebuttal Testimony of
Richard M. Markey
Docket No. 160186-EI
In Support of Rate Relief
Date of Filing: February 8, 2017

Q. Please state your name, business address and occupation.

A. My name is Richard M. Markey and my business address is One Energy Place, Pensacola, Florida, 32520. I am the Director of Environmental Affairs for Gulf Power Company (Gulf or the Company).

Q. Have you previously filed testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to address the portions of Office of Public Counsel (OPC) Witness Ramas's testimony in which she argues that Gulf has not justified putting the entire North Escambia site into Plant Held for Future Use. I show that the entire 2,728 acreage at the North Escambia site will be needed to site gas-fired generation and that the requested preliminary survey and investigation (PS&I) costs will be used in siting gas-fired generation and are, therefore, reasonable and prudent.

Q. Are you sponsoring any rebuttal exhibits?

A. Yes. I am sponsoring Exhibit RMM-3 which includes the following documents:

- Schedule 1 - Late-Filed Exhibit No.3 to the Deposition of Michael Burroughs (Redacted)
- Schedule 2 - North Escambia Preliminary Well Field Location (Confidential)
- Schedule 3 - North Escambia Summary of PS&I Costs

Exhibit RMM-3 was prepared under my direction and control, and the information contained therein is true and correct to the best of my knowledge and belief.

THE MATTER AT ISSUE

Q. Have you read the testimony of Ms. Ramas?

A. Yes, I have.

Q. Do you agree with the conclusion drawn by Ms. Ramas on page 66 of her testimony regarding whether the entire 2,728 acres of the North Escambia site are necessary for construction of gas-fired generation?

A. I do not. Gulf needs the full 2,728 acres to site future gas-fired generation at the North Escambia site. Groundwater modeling is underway to determine the quantity and configuration of groundwater supply wells required to provide the normal water supplies needed for gas-fired generation and the necessary backup water source adequate for emergency drought situations and other supply interruptions. Under normal

conditions, the majority of the water required for generation will be pulled from the Escambia River. However, as a risk mitigation measure and to protect against significant drought periods, additional groundwater withdrawals will be necessary to supplement surface water flows.

A professional geologist was retained to model and to provide a professional opinion regarding the land needs for a well field. This professional opinion was provided to the OPC prior to the filing of Ms. Ramas's testimony, as Late-Filed Exhibit No.3 to the deposition of Gulf Witness Burroughs. I provide a copy of this professional opinion in my Exhibit RMM-3, Schedule 1. This document shows that preliminary groundwater modeling indicates that a well field across the site will be required to produce an adequate volume of water for gas-fired generation during drought and other interruption periods.

A figure depicting the preliminary well field location is provided in Exhibit RMM-3, Schedule 2. As depicted on Schedule 2, the well field will encompass the entire 2,728 acres to obtain an adequate volume of water; therefore, the entire 2,728 acres is needed to allow for gas-fired generation at the North Escambia site.

Q. Do you agree with the conclusion drawn by Ms. Ramas on page 63 of her testimony regarding the prudency of the PS&I costs?

A. No. The PS&I studies provided information that is necessary for site layout and design of gas-fired generation at the North Escambia site and will be a

key component in obtaining state permits and meeting licensing requirements for gas-fired generation. Specifically, the information is needed both to develop a Site Certification Application required by the Florida Siting Board under the Florida Electrical Power Plant Siting Act for a combined cycle generating unit and to support groundwater modeling required for the Northwest Florida Water Management District (NWFWMD) consumptive use permit. My Schedule 3 is a summary of the North Escambia PS&I costs.

Q. How does Gulf plan to use the PS&I information to benefit Gulf in siting and permitting new gas generation on the North Escambia site?

A. The PS&I information is needed for three critical aspects of siting gas-fired generation: 1) geotechnical investigation; 2) site assessment; and 3) the water supply resource assessments.

Q. Explain how the PS&I information is critical to the geotechnical investigation.

A. During the preliminary planning and evaluation phases of a new generation project, it is necessary to perform a geotechnical exploration of a potential site to evaluate and characterize soil conditions across the property. This investigation assists with preliminary cost estimates and the evaluation of available sources of water on the site. While the geotechnical investigation may have been performed initially in evaluating other potential generation resources, it is needed and will be used for siting gas-fired generation at the North Escambia site. Geotechnical information gathered during PS&I

activities will be relied upon heavily when determining the most appropriate footprint(s) for any future generation facilities.

Q. Explain how the PS&I information is critical to the site assessment necessary for siting gas-fired generation at the North Escambia site.

A. The PS&I information will directly respond to requirements of the Site Certification Application under the Florida Electrical Power Plant Siting Act. These requirements include assessment of water supply resources, hydrological studies, geologic assessments, and water supply treatment options. Additionally, the PS&I information encompassed an investigation of site and vicinity characterization which includes: transmission lines, pipelines, airports, Superfund Amendments and Reauthorization Act sites, floodplains, wetlands, Class 1 Areas, nearest dams, and population density, along with access and egress to the site via roadway, railway, and barge. This information will be necessary for siting of gas-fired generation at the North Escambia site.

Q. Explain how the PS&I information is critical to water supply resource assessments necessary for siting gas-fired generation at the North Escambia site.

A. The geotechnical and geophysical data developed during PS&I activities has been used for groundwater modeling needed to evaluate water supply resources at the site. A water supply well was constructed and was used for pump testing in 2016 to calibrate required groundwater modeling. The geotechnical and geophysical information from previous investigations has

also been utilized to help construct the groundwater model needed to design a well field and will be needed to apply for a consumptive use permit.

Q. Mr. Markey, is Gulf currently conducting preliminary engineering studies or investigations of the North Escambia site?

A. Yes. In 2016, Gulf performed a groundwater pump test that is required to collect additional information needed to support a NWFWMD consumptive use permit application for the site. Gulf is also in discussions with the NWFWMD to work toward permitting for consumptive use.

Q. How long would it take to permit and build a combined cycle generating facility at a new site?

A. Permitting and construction of a combined cycle generation facility is estimated to take up to six years for a new Greenfield site once the property is purchased. Gulf's ownership of the North Escambia property provides a benefit to our customers because preliminary data is already available. This available data can be utilized to permit new generation at the North Escambia site, whether it be gas-fired or even solar generation, which will shorten the time required for site layout and design as well as the permitting timeline.

Q. Do the requested PS&I charges of $3,576,010 include all charges associated with the PS&I activities for North Escambia?

A. No. Gulf reviewed all expenditures for the North Escambia site and excluded costs that could not be used for siting gas-fired generation. The

excluded costs total $1,349,632, representing legal fees and other studies specific to nuclear generation, which, in contrast to other studies, cannot be used for siting a combined cycle facility.

Q. Mr. Markey, please summarize the costs that are currently included in the PS&I account.

A. The costs are primarily associated with geotechnical studies, professional services for selection of the water intake and discharge locations, groundwater and surface water studies, and meteorological data collection, all of which can and will be used for evaluating combustion turbine or combined cycle units at the site.

Q. Mr. Markey, please summarize your rebuttal testimony.

A. The entire acreage at the North Escambia site will be needed to site gas-fired generation. The remaining PS&I costs that have not been excluded have and will be used to develop reports and studies that will be used in siting gas-fired generation in the future and are, therefore, reasonable and prudent. The investigation and purchase of this site preserves valuable gas-fired generation options for Gulf's customers.

Q. Does this conclude your rebuttal testimony?

A. Yes.

GULF POWER COMPANY

Before the Florida Public Service Commission
Rebuttal Testimony of
Jarl T. Young
Docket No. 160186-EI
In Support of Rate Relief
Date of Filing: February 8, 2017

Q. Please state your name, business address and occupation.

A. My name is J.T. Young. My business address is One Energy Place, Pensacola, Florida 32520, and I am the Customer Service General Manager for Gulf Power Company (Gulf or the Company).

Q. Have you previously filed testimony in this proceeding?

A. No. However, I have adopted the direct testimony of Gulf Witness Terry. From this point forward I will be referring to Ms. Terry's direct testimony as my own.

Q. What are your responsibilities as the Customer Service General Manager?

A. In this role, I am responsible for the Company's customer service organization and associated strategies, policies and processes. I directly lead Gulf's teams that comprise our Customer Care Center (CCC) and Customer Support areas and I have functional responsibilities for our customer facing employees in our district and local offices.

Q. Please state your work experience and responsibilities.

A. I began my career with Gulf Power in 1989 and progressed through various leadership roles within Gulf Power and Southern Company Services (SCS)

in the areas of marketing, customer service, information technology and strategic planning. Prior to my current role, I served as Corporate Services Director for Gulf Power. Prior to joining Gulf Power, I held various engineering and marketing related roles with Florida Power Corporation (now Duke Energy, Florida) and the Tennessee Valley Authority.

Q. What is your educational background?

A. I hold an MBA from the University of West Florida and a Bachelor of Science in Electrical Engineering from the University of Florida. I also successfully completed the General Management Program at Harvard Business School.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my testimony is two-fold. I address the direct testimony of Office of Public Council (OPC) Witness Ramas as it relates to SCS expenses for the Energy Innovation Center (EIC). Additionally, I provide a greater level of detail around the two apparent Commission rule violations against Gulf as described by Commission Staff Witness Hicks.

Q. Are you sponsoring any rebuttal exhibits?

A. No.

I. ENERGY INNOVATION CENTER

Q. Please describe OPC Witness Ramas's direct testimony as it relates to the EIC.

A. Witness Ramas asserts, in her testimony, that the EIC will not bring benefits to Gulf's customers and thus, recommends excluding the associated expenses from the test year budget.

Q. Do you agree with Witness Ramas's claims?

A. Absolutely not. Innovation is a key ingredient to the long-term success of any industry and the utility industry is no exception. Our customers not only benefit from innovation, but they expect Gulf to continue the long-standing tradition of the development of products and services that bring value to their lives. The EIC is an important tool for Gulf to use in this endeavor.

Q. Please describe the EIC and its purpose.

A. The EIC is an SCS organization that provides innovation support to many of Southern Company's subsidiaries, including Gulf. As it relates to Gulf, the ultimate goal of the EIC is to support the Company in encouraging, fostering and seeking out innovation which results in products and services that anticipate needs and improve the lives of our customers. The EIC is one of many tools available to Gulf to ensure that we are able to execute on our customer-centered philosophy both now and in the future. As I stated in my direct testimony, Gulf's customer service philosophy is to put our customers at the center of everything we do. We provide service that fits the lives of

our customers by giving them convenience, customization and control. Our philosophy rests on capable employees, tools and technologies to anticipate customers' needs and credible, trusting relationships.

Gulf has a history of being a leader in innovation, offering first-of-a-kind products like the Good Cents Home Program and Energy Select, the first critical peak pricing program in the nation. That tradition continues with recent offerings like the Smart Energy pilot which I discussed in my direct testimony.

Q. How does the EIC encourage, foster and seek out innovation?

A. Innovation begins with a culture. It is an intentional and long-term process. Innovative ideas are found throughout an organization, not just from employees who reside in specific roles. In fact, who better to offer innovative ideas than our employees who work with our customers every day? It takes everyone in the organization engaging in the process and ultimately the vision to see innovation truly make a difference. Partnering with Gulf, the EIC helps to foster innovative ideas in three primary ways: Employee Submissions, External Partnerships and Employee Project Teams.

Q. Please explain how Employee Submissions are used.

A. The EIC serves in a support role and has a small staff of full-time employees. As I already stated, innovative ideas exist across the organization – the key is finding a way to tap into those ideas and bring

them to the forefront for consideration and evaluation. The EIC sponsors internal competitions and offers platforms where employees can submit ideas.

Q. Would you please elaborate on what you mean by internal competitions?

A. One example was a Southern Company-wide, internal competition named So Prize. The competition stimulated innovative ideas to address the challenges faced by our Company and customers in the future. As a result of the So Prize competition, six “winning” ideas were selected. Two of those ideas came from Gulf employees. These ideas, one of which I discuss later in my testimony, are being evaluated for their future possibilities.

While So Prize was a fairly broad competition, Gulf, with the assistance of the EIC, also recently held Power to Grow innovation sessions throughout the Company. These Gulf-specific sessions were well-attended and resulted in many Gulf-specific proposals that are still undergoing evaluation. Engaging all employees and making innovation a part of each employee’s daily thoughts does not happen by chance. These sessions are great examples of how the EIC supports Gulf and our customers in these efforts.

Q. Please explain how External Partnerships are used.

A. The EIC actively seeks partnerships with leading innovation organizations, current and potential vendors, universities, research organizations, and like-minded businesses around the world. The EIC is located in Atlanta’s

Technology Square, positioning its staff to develop these partnerships, which Gulf is able to leverage in developing solutions that make our customers' lives better. Without the EIC, these resources would not be reasonably available to Gulf.

Q. Please elaborate on what you mean by Employee Project Teams.

A. The EIC employs a small number of full-time employees. As an idea is generated, ad hoc teams are formed to vet the idea and determine how or if it should be carried forward. The EIC has established a five-step process to facilitate the efficient vetting of ideas and to make the process repeatable by new and different employees. While not all ideas are viable in the long term, the process ensures that no idea is left behind. As teams move through the pipeline process, the idea's progress is tracked. These teams are often made up of employees from across Southern Company, which again provides knowledge and skills that wouldn't be feasible if Gulf were attempting to manage this process on its own.

Q. Please provide examples of projects that the EIC has fostered which benefit Gulf's customers.

A. The EIC has only been established formally since 2015. As I previously mentioned, innovation is a long-term proposition and thus, we are in the infancy stage of the EIC and its impact on Gulf's customers. However, there are a couple of projects worth noting that have had tangible benefits to Gulf's customers. First, the REVolution project was one of the So Prize submissions made by one of Gulf's employees. The idea of REVolution is

to accelerate the adoption of plug-in electric vehicles (PEV) through several key objectives, primarily pre-sale education and awareness. Gulf has worked closely with the EIC to test aspects of this idea including the "Coffee and Cars" events that I spoke of in my direct testimony. These events are held at local coffee shops and present customers with the opportunity to participate in ride-alongs in a variety of PEVs and ask Gulf personnel questions about PEVs. These events had strong participation and customer feedback was very positive. The REVolution project includes other aspects which will continue to be explored and tested with customers.

Another example of a project where Gulf is maximizing its use of the resources at the EIC is the "Neighborhood of the Future." While this project is still in the development phase, it involves planned communities of super-energy-efficient, sustainable homes. These homes would integrate energy management and efficiency technologies, distributed generation technologies (including solar panels, energy storage, and other microgrid capabilities), and a variety of connected home technologies. These futuristic neighborhoods will provide Gulf's customers with homes that contain state-of-the-art technologies like smart thermostats and other smart appliances all connected through a hub to maximize their efficiency. Low-E impact resistant windows, geo-thermal heating ventilation and cooling (HVAC) systems, whole-house surge protection, smart street lighting, medical technologies for comfortably aging in place, and other technologies will be included to maximize energy efficiency and the comfort of our customers. Gulf is working with the EIC to test these technologies as well

as the full Neighborhood of the Future concept. The EIC's relationships with vendor partners and their ability to help perform research on many of these technology areas will provide many benefits to Gulf's customers now and in the future.

Q. Do Gulf's customers benefit from the EIC?

A. Absolutely. As I've already described, the EIC not only partners with Gulf to contribute resources and relationships to enable products and services that enhance the lives of Gulf's customers today and into the future, it also plays an important role in building on Gulf's existing culture of innovation that is a necessary and distinctive component of our business. Gulf strives to anticipate customer needs and be their energy partner ready to exceed their expectations with the products and services that we offer. The EIC is an important component of that strategy.

Q. Are there other ways that Gulf's customers benefit?

A. Yes. As discussed in the direct testimony of Gulf Witness Hodnett, all services provided to Gulf by SCS are provided at cost with no profit mark-up. The EIC, as an SCS entity, does the same. Gulf could not get these important services from a third-party provider at cost as any third-party provider would certainly include a profit mark-up. Additionally, if Gulf added in-house employees to provide similar services, Gulf would be responsible for those employees' full costs of compensation and other expenses. The EIC employees, on the other hand, are currently shared by multiple Southern Company operating companies. This shared cost structure allows

Gulf to both utilize the highly technical and specialized skills of the EIC as well as benefit from their collective external partnerships on an as-needed basis.

In addition to the cost benefits, Gulf's customers also benefit because the EIC operates for the entire Southern Company, a scale much larger than Gulf alone. They are able to establish relationships with partners and develop research and pilot projects that Gulf, alone, would not be capable of doing. As I've already mentioned, the EIC is a new entity; therefore, products and services are still in the development process. But having access to the EIC's services will result in long-term value for Gulf's customers.

II. CUSTOMER COMPLAINT ACTIVITY

Q. Please describe Gulf's customer complaint activity for the period of January 2013 – December 2016.

A. As stated by Staff Witness Hicks, Gulf had 1,866 complaints logged during this four-year period. Of those, 1,781, or 95 percent, were transferred to Gulf and resolved by Gulf working directly with the customers, leaving 85 total calls over the four-year period recorded (logged) as an actual complaint requiring Commission involvement. Of the complaints logged, the vast majority, 85 percent, were billing related issues, while only 15 percent were related to quality of service type issues.

Q. During this same time, did any of the complaints by Gulf's customers result in apparent rule violations?

A. Yes, two of the complaints resulted in apparent rule violations.

Q. Would you characterize it as typical for Gulf to have complaints that result in apparent rule violations?

A. No. Excluding these two cases, since 2002, Gulf has only had one instance where a customer complaint resulted in a rule violation. In that situation, the issue was completely resolved, but Gulf's final report was submitted to the Commission a few minutes after the deadline resulting in the violation.

Q. Given the fact that it is unusual for Gulf to have any complaints result in apparent rule violations, please describe these two cases in more detail.

A. The first case involved a customer who initially called Gulf seeking assistance with what he perceived as a high electric bill. This customer lives in a multi-family residence. After a couple of discussions with our Customer Care Center, it was suggested that Gulf send an energy auditor to the customer's residence to perform an energy audit. During the energy audit, several recommendations were made to the customer for HVAC and appliance upgrades that would likely result in decreased usage and a lower electric bill. The customer took action on many of these suggestions, but saw no resulting reduction in his electric bill. Additionally, during that same time frame, a meter test was conducted on the meter designed for his unit showing that the meter was functioning within the limits set forth by the Commission.

Q. What happened next?

A. After multiple conversations with the vendors that the customer used for many of the upgrades and Gulf Power personnel, the customer hired an electrician to come to his residence and perform additional investigatory work. It was determined by the electrician as part of this work that, apparently, the meter can for his unit was incorrectly labeled as an adjacent unit and vice versa resulting in this customer being billed not for the usage from his unit, but from his neighbor's unit. This labeling error was likely made by the electrician or building owner when the facility was originally built.

Q. Was the customer over-billed?

A. Actually, through a bill analysis, it was determined that the customer who filed the complaint was under-billed over the period in question and his neighbor was over-billed. Gulf has refunded the neighbor for the over-billed amount.

Q. If Gulf personnel are not responsible for labeling meter cans, why did this complaint result in an apparent rule violation for Gulf?

A. The apparent rule violation is due to the fact that Gulf did not bill these two customers accurately for the period in question.

Q. Were other recommendations made by the Commission as a result of this case?

A. Yes, the Commission recommended, and Gulf agrees, that the Company make changes to energy audit processes to try and ensure that, if situations like this occur in the future, we are able to more quickly identify the issue. Gulf takes seriously our role as energy experts, and we intend to fully evaluate what process changes we can implement so that even in situations where the issue is not with Gulf's equipment, we are able to assist the customer by proactively identifying the issue and recommending a solution.

Q. What specific changes does Gulf intend to make?

A. The importance of identifying a potential crossed meter by verifying the electrical load with a breaker check or other means was communicated to our energy auditors. This includes utilizing a Field Service Representative or Meter Technician if the auditor cannot affirmatively determine that the meter is associated with the customer in question.

Additionally, Gulf is pursuing enhancements to this process that would allow us to verify the customer's billing meter as the correct meter for their premise without potentially damaging any customer equipment by switching a breaker on and off. For example, we are investigating the use of a circuit tracer which provides a non-intrusive, safe way to ensure the meter in question is recording the energy usage for the designated premise. A solution such as this would have the same result as the breaker check while

minimizing potential safety issues and risk for equipment damage in the customer's home.

Q. Please describe the second apparent infraction.

A. In the second case, a customer filed a complaint with the Commission regarding an outdoor street light, paid for by his neighbor, which was shining too brightly into his residence.

Q. What was Gulf's response to this complaint?

A. On the afternoon that the Company received the complaint, Gulf's Lighting Services team installed a shield on the light to prevent it from shining into the customer's residence.

Q. Was this solution acceptable to the customer?

A. After installing the shield, Gulf personnel attempted to contact the customer with no success. Company personnel made five separate premise visits, left several telephone messages, sent an email, and mailed a letter to the customer. Since a resolution was put in place immediately upon receiving the customer's inquiry and no response was received from the customer, Gulf concluded that no response indicated the customer was accepting of the resolution.

Q. If the solution was deemed acceptable and all deadlines were met, why was it determined that there was an apparent rule violation?

A. Commission Rule 25-22.032 (6)(b) states “the company shall make direct contact with the customer verbally or in writing and provide to the customer its response to the complaint within 15 working days.” In this instance, Gulf’s letter to the customer was determined to have not clearly enough identified the solution, but rather, seemed more a letter asking that the customer contact the Company.

Q. What else would you like to add on the subject of customer complaints?

A. Gulf has a proven track record of outstanding customer service. This is proven not only in the fact that customer complaints to the Commission remain low, but also, as I stated in my direct testimony, in all measures of customer satisfaction.

Q. Mr. Young, does this conclude your rebuttal testimony?

A. Yes.

CHAIRMAN BROWN: All right. Any other preliminary matters? Seeing none from the parties --

MR. REHWINKEL: Madam Chairman. I'm not sure that I heard, was -- are the depositions, were they part of -- there are four depositions that I think were agreed to.

CHAIRMAN BROWN: Staff?

MS. CORBARI: They've been -- the depositions of the three ROE witnesses and Witness Loiter have been included on the Comprehensive Exhibit List.

MR. REHWINKEL: Okay. Thank you.

CHAIRMAN BROWN: All right. And they are already entered into the record.

All right. Any other matters that need to be addressed, Mr. Stone?

MR. STONE: Yes, Madam Chair. We currently have a brief deadline of March 31st. Given that we have a settlement before the Commission, we would ask that -- well, first, I'd ask -- now that all the testimony has been inserted into the record, we'd ask that all our witnesses be excused from further attendance, and that we'd also ask that we be relieved of the obligation to file briefs.

CHAIRMAN BROWN: I was waiting for someone to

ask for that. Thank you. Well, we will go ahead, and seeing no objection, excuse all the witnesses to the proceeding.

And as for the briefs, since we are in recess right now, and we must take up the settlement agreement first before we can adjourn this hearing, we'll deal with the briefs and the scheduling of the briefs, if any, at that Tuesday, April 4th, date.

MR. STONE: Okay. So is there any brief due on March 31st?

CHAIRMAN BROWN: No, that is correct. There are none. Thank you.

Parties, any other comments, questions, or clarification?

Mr. Rehwinkel.

MR. REHWINKEL: Yes, Madam Chairman. With regard to the stipulations that you approved in Exhibit 248, I wanted to state -- I've been doing this for over 30 years now, and this case was very well run and well organized by your staff. The stipulation process, what it did is it took 100-and-something issues and it narrowed it down to a relatively small number. And absent that process happening, which I give credit to all the parties and the company, I don't know that we would have gotten the issues in dispute down to a

manageable level that we were able to have a dialogue that led to the settlement this weekend. So I think that's a very important process that happened.

This settlement, in our view, was fully informed. It was based on what we knew we had to come and litigate before this Commission, and we were prepared to do. So this stipulation process that your staff played a crucial role in facilitated this process. It was very transparent to the public and to the parties, and it led to what you have before you now and that we hope leads to a successful conclusion on -- when we meet back again. So I wanted to thank the Commission and the parties and the staff especially.

CHAIRMAN BROWN: Thank you. Thank you for that, Mr. Rehwinkel. And we will be giving a lot of accolades to our staff once this proceeding is fully finished. But they have been working very diligently, very hard, and the attorneys on the staff, along with the technical staff, have just been doing a stellar job at keeping all of us informed and have worked really hard, around the clock really. But we will give you all that credit at the conclusion of the matter.

Any other matters that need to be addressed today? Seeing none, we are in recess

until Tuesday, April 4th. See you at 9:00 o'clock in here. Thank you.

(Proceeding recessed at 2:53 p.m.)

STATE OF FLORIDA)
: CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, LINDA BOLES, CRR, RPR, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney, or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 22nd day of March, 2017.

LINDA BOLES, CRR, RPR
Official FPSC Hearings Reporter
Office of Commission Clerk
(850)413-6734