

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

3244

SCANNED

RECEIVED-PPSC

99 MAR -2 PM 4: 29

RECORDS AND
REPORTING



A SOUTHERN COMPANY

March 2, 1999

Ms. Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0870

990244-EI

Dear Ms. Bayo:

Enclosed are an original and fifteen copies of the Petition of Gulf Power Company for Approval of Proposed Plan for an Incentive Revenue Sharing Mechanism that Addresses Certain Regulatory Issues Including a Reduction to the Company's Authorized Return on Equity.

Sincerely,

Susan D. Ritenour

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer

lw

Enclosures

cc: Beggs & Lane
Jeffrey A. Stone, Esquire

RECEIVED & FILED

[Signature]
FRSC-BUREAU OF RECORDS

DOCUMENT NO.
 99
Mar 2

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Petition of Gulf Power Company for)
approval of proposed plan for an incentive) Docket No.: _____
revenue sharing mechanism that addresses) Filed:
certain regulatory issues including a reduction)
to the Company's authorized return on equity.)
_____)

**PETITION OF GULF POWER COMPANY FOR APPROVAL OF PROPOSED PLAN
FOR AN INCENTIVE REVENUE SHARING MECHANISM THAT ADDRESSES
CERTAIN REGULATORY ISSUES INCLUDING A REDUCTION TO THE
COMPANY'S AUTHORIZED RETURN ON EQUITY**

GULF POWER COMPANY ("Gulf Power," "Gulf," or "the Company"), by and through its undersigned counsel, hereby seeks the approval of the Florida Public Service Commission ("Commission") and authority to implement Gulf Power's proposal for an incentive revenue sharing mechanism that addresses certain regulatory issues including a reduction to the Company's authorized return on equity. As part of this petition and the associated proposal, the Company specifically requests that this matter be presented to the Commission for decision as a Proposed Agency Action at the earliest practical opportunity. As grounds for the relief requested by this petition, the Company would respectfully show:

1. Gulf is a corporation with its headquarters located at 500 Bayfront Parkway, Pensacola, Florida 32501. The Company is an investor-owned electric utility operating under the jurisdiction of this Commission. Notices and communications with respect to this petition and docket should be addressed to:

Jeffrey A. Stone
Russell A. Badders
Beggs & Lane
P. O. Box 12950
Pensacola, FL 32576-2950

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer
Gulf Power Company
One Energy Place
Pensacola, FL 32520-0780

2. As a result of discussions with members of the Commission's Staff, Gulf has become aware that the staff wanted to address, effective January 1, 1999, the continued appropriateness of deferring a return on the cost associated with the third floor of the Company's corporate headquarters¹, the deficient balance in the Company's accumulated provision for property insurance ("Property Insurance Reserve")², the balances of several unamortized regulatory assets and the continued appropriateness of the Company's current authorized return on equity ("ROE")³. In order to address these issues and other regulatory issues that are of concern to the Company, Gulf Power has developed a three-year (1999-2001) proposal for addressing certain regulatory issues that incorporates a reduction to the Company's authorized ROE and provides for an incentive revenue sharing mechanism. The Company's proposal is set forth in Attachment "A" to this petition which is incorporated herein by this reference.

3. Gulf's proposal properly takes into account significant differences between it and other Florida electric utilities in regards to five year trends in key indicators related to electricity

¹See Order No. 23573, issued October 3, 1990 in Docket No. 891345-EI (Gulf Power's last full base rate adjustment proceeding). Pursuant to that order, the Commission disallowed \$3,840,807 of plant investment identified in the order as associated with the third floor of the corporate headquarters. (Order 23573 at page 9). Although the Commission disallowed the investment associated with the third floor, Gulf Power is allowed to earn a deferred return on the disallowed plant investment. (Id.) The amount deferred in 1998 was \$430,000. The accumulated balance of such deferred returns as of December 31, 1998 is approximately \$2.9 million.

²The reserve has been depleted by the effects of numerous tropical storms and hurricanes since 1995. The balance as of 12/31/98 was \$1.6 million as compared to a target reserve of \$25 million to \$36 million approved by the Commission in Order PSC-96-1334-FOF-EI issued 11/5/96.

³The midpoint of Gulf Power's current authorized ROE is 12.0% with a range from 11.0% to 13.0%.

prices, reliability of electric service, and justified customer complaints to the Commission.⁴ The data on the key indicators shown on Attachment “B” to this petition show sustained superior performance by Gulf Power, both in absolute numbers and in general trends,⁵ in three areas that the Commission considers important: (1) prices to residential customers; (2) number of minutes of interruption per customer per year (System Average Interruption Duration Index or SAIDI); and (3) customer complaints to the Commission (justified complaints or infractions). As reported for the periods indicated in the latest public documents available, the Company’s performance on these key customer service indicators reflects the type of exemplary results and management efficiency which the Commission has the discretion to reward through enhancements to the authorized ROE.⁶ The Company’s performance on the key customer service indicators is also the basis for the initiation of an incentive revenue sharing arrangement whereby certain incremental

⁴Pursuant to §366.041 of the Florida Statutes, “In fixing the just, reasonable, and compensatory rates, charges, fares, tolls, or rentals to be observed and charged for service within the state by any and all public utilities under its jurisdiction, the commission is authorized to give consideration, among other things, to the efficiency, sufficiency, and adequacy of the facilities provided and the services rendered; the cost of providing such service and the value of such service to the public; . . .”(emphasis added).

⁵It is important to review such indicators on a long term basis due to the potential for abnormal variations on a year to year basis.

⁶The Florida Public Service Commission has the discretion to make adjustments to the authorized return on equity “. . . to account for such things as accretion, attrition, inflation and management efficiency.” *United Tel. Co. v. Mann*, 403 So.2d 962, 966 (Fla. 1981) (emphasis added). The Commission’s authority to make adjustments to the authorized return on equity “. . . includes the discretion to reward, within the reasonable rate of return range, for management efficiency.” *Gulf Power Co. v. Wilson*, 597 So. 2d 270, 273 (Fla. 1992). See also *Gulf Power Co. v. Cresse*, 410 So. 2d 492 (Fla. 1982) (Gulf Power received a ten basis point reward for efficient management through its energy conservation efforts); *In re General Tel. Co.*, 44 Pub.Util.Rep.3rd (PUR) 247 (Fla. P.S.C. 1962) (Commission found utility operated efficiently and deserved recognition through increase in return).

revenues are shared between customers, the Company and accelerated amortization of certain regulatory assets and/or accruals to the Property Insurance Reserve. Gulf's performance on these three key indicators did not "just happen." To the contrary, Gulf's performance reflects management's long term focus on issues related to customer satisfaction and value. Attachment "C" to this petition shows Gulf's very superior overall customer satisfaction and perceived value relative rankings based on the most recent 1998 Benchmark Survey. Attachment "C" also contains a discussion of numerous proactive initiatives undertaken by Gulf's management over the years to favorably impact these key customer service indicators.

4. The ROE component of Gulf's proposal not only takes into account the differences between utilities on the key customer service indicators noted above, but also takes into account differences between Gulf and other electric utilities on such elements as equity ratio and business risk. These differences demonstrate why one "cookie cutter" authorized ROE level does not necessarily fit all utilities at a given point in time. Detailed discussion of the differences between utilities and the related justification for the ROE component of Gulf's proposal is set forth in Attachment "D" to this petition which is incorporated herein by this reference.

5. The proposal set forth in Attachment "A" contains a number of key components that provide for substantial benefits to the Company's customers, both in the short term and in the long term. At the same time, the revenue sharing mechanism of the Company's proposal provides an appropriate incentive for management to initiate actions to maximize the revenues available for sharing on a cost-effective basis. The proposal provides a simultaneous opportunity for credits to customer bills, reasonable amortization of certain regulatory assets and/or added accruals for the property insurance reserve and Company retention of a reasonable portion of the

shared revenues if it is able to achieve earnings beyond the top of the traditional zone for authorized rate of return. This type of incentive revenue sharing concept is similar to mechanisms previously approved by the Commission and more recently by Georgia's PSC.⁷ The Company's proposal strikes a balance that provides WIN-WIN opportunities to address the respective interests of its customers and its shareholders. The starting point for revenue sharing ("revenue sharing point") in Gulf's proposal is set 100 basis points above the new proposed midpoint of the authorized ROE in recognition of the fact that the Commission has traditionally allowed the Company to earn up to 100 basis points above the midpoint. However, unlike the traditional "top of the zone" concept for authorized ROE which tends to limit opportunities for earnings growth, the opportunity to share in added earnings above the top of the zone that is created by Gulf's proposal further encourages the Company to pursue additional efficiency gains and other cost effective measures for improving earnings in order to enter the revenue sharing range to the benefit of customers and shareholders alike.⁸

⁷The Florida Public Service Commission previously authorized a similar incentive revenue sharing plan for Southern Bell Telephone in Order No. 20162 entered in Dockets 880069-TL and 870832-TL. The Georgia Public Service Commission, by its Order Adopting Modified Stipulation in Docket No. 9355-U decided December 18, 1998, has also approved a similar incentive revenue sharing mechanism for Georgia Power Company. In the case of Southern Bell, the revenue sharing point was established 125 basis points above the middle of the authorized ROE range (11.5% to 14.0%) with an upper limit on the revenues subject to sharing set at 16.0% ROE (measured after sharing). This upper limit was established at a point 200 basis points above the top of the authorized range. In the case of Georgia Power, the revenue sharing point was established 125 basis points above the midpoint of the authorized ROE (10.0% to 12.5%) with no upper limit on the revenues subject to sharing.

⁸As noted earlier in the paragraph, the Commission has traditionally allowed Gulf to earn 100 basis points above the midpoint established as the authorized ROE. This 100 basis point margin established "the top of the range." If the sharing point was set at a point less than the normal top of the range, this would adversely affect the Company's shareholders who are currently entitled to keep all earnings up to 100 basis points above the midpoint. Thus, the chosen sharing point provides an incentive to achieve earnings above the traditional cap by allowing the shareholders to retain a portion of these incremental earnings. The traditional range does not allow for such added incentive.

6. As noted in paragraph 5 above, there are many benefits to customers provided by Gulf's proposal over its three-year term. The following items are examples of such benefits:

- a. **The opportunity for credits on customer bills that are already among the lowest in the country.** This opportunity begins in early 2000 if the Company's earnings exceed the revenue sharing point for calendar year 1999. The opportunity is provided without regulatory lag associated with lengthy rate case proceedings and will continue for earnings achieved in the years 2000 and 2001.
- b. **The opportunity for limited and reasonable accelerated amortization of certain regulatory assets without any increase in customers' rates.** This opportunity for reducing Gulf's rate base and corresponding future rates for Gulf's customers will be realized as part of the revenue sharing plan if the Company's earnings exceed the revenue sharing point in any year covered by the proposal.
- c. **Potential increases to the accruals for the Company's Property Insurance Reserve without any increase in customers' rates.** Once again, this opportunity is based on the revenue sharing mechanism of the proposal which is designed to operate if the Company's actual earnings exceed the revenue sharing point.
- d. **The Company's authorized ROE zone is reduced retroactive to January 1, 1999.** The retroactive reduction would not otherwise be possible without the Company's agreement. The prospective reduction is accomplished without regulatory lag or the need for lengthy hearings on cost of capital, etc.

The proposal's explicit recognition of Gulf's superior performance on key operating performance indicators of price, reliability, and customer complaints supports the continuing focus on these key indicators by the Commission and the companies it regulates.

7. As part of Gulf's proposal, the Company is willing to accommodate a January 1, 1999 effective date. In exchange for this retroactive effect, Gulf requests that the proposal presented by this petition be considered by the Commission as a Proposed Agency Action. The Company further requests that this matter be placed on an agenda for Commission consideration at the earliest practical opportunity.

WHEREFORE, Gulf Power Company respectfully requests the Commission to approve and authorize implementation of the Company's proposal for an incentive revenue sharing mechanism that addresses certain regulatory issues including a reduction to the Company's authorized return on equity and that such approval and authorization be set forth in a Proposed Agency Action order issued by the Commission at the earliest practical opportunity.

Respectfully submitted the 2nd day of March 1999.



JEFFREY A. STONE
Florida Bar No. 325953
RUSSELL A. BADDERS
Florida Bar No. 7455
Beggs & Lane
P. O. Box 12950
Pensacola, Florida 32576-2950
(850) 432-2451
Attorneys for Gulf Power Company

Attachment "A"

The following is Gulf Power Company's proposal for addressing certain regulatory issues including a reduction to the Company's authorized return on equity ("ROE")¹:

1. This plan covers calendar years 1999, 2000 and 2001.
2. Effective January 1, 1999, Gulf Power's authorized ROE will be established at a midpoint of 11.8% (reduced from 12.0%) for all regulatory purposes with an authorized range of 10.8% to 12.8%.
3. Effective January 1, 1999, Gulf Power will no longer accrue a deferred return on the cost of the third floor of the corporate office as authorized and identified by the Florida Public Service Commission in Order No. 23573 issued October 3, 1990 in Docket No. 891345-EI (Gulf Power's last full base rate adjustment proceeding). The accumulated balance of such deferred return together with the identified third floor investment amount shall be included in the Company's authorized jurisdictional rate base and be subject to depreciation and amortization for purposes of calculating the achieved jurisdictional return beginning January 1, 1999.
4. Effective January 1, 1999, Gulf Power's merchandising operations and any other non-utility investment excluded from the Company's jurisdictional rate base for surveillance purposes will be removed from the Company's capital structure on a pro rata basis (instead of totally from equity) in order to be consistent with the manner in which the Company actually finances such investments.²
5. After the close of each calendar year covered by this plan, the amount of any actual revenues contributing to earnings above the revenue sharing point of 12.8% up to a ceiling on ROE of 14.3% (measured after sharing) for that calendar year will be divided into three shares on a 40%, 20%, 40% basis. These shares are to be distributed as follows:

¹The provisions of this proposal will not take effect unless and until approved by an order of the Florida Public Service Commission that becomes final and is not subject to further review. The foregoing statement is not intended to restrict the ability of any person having sufficient interest to seek initiation of a rate proceeding during the period covered by the plan.

²This item reflects the need to reassess the continued appropriateness of a decision reached nearly 10 years ago in Gulf's last rate case. This reassessment is of the same character as the reassessment reflected in item 3 above.

One 40% share of such revenues shall be refunded to Gulf's retail customers during the following calendar year as a credit through the Company's fuel adjustment clause or in such other manner as may be approved by the Commission.

The 20% share of such revenues (such share hereafter referred to as "plan revenues") will be utilized to address certain regulatory issues under this plan as set forth in the remainder of this paragraph. The following items (in priority order) constitute regulatory assets that are to be addressed under this plan:

- (a) outstanding balance of deferred returns on the cost of the third floor of the corporate office (approximately \$2.9 million) ["Regulatory Asset A"];
- (b) outstanding balance of the flow through portion of the FAS 109 regulatory asset (approximately \$1.7 million) ["Regulatory Asset B"]; and
- (c) outstanding balance of loss on reacquired debt (approximately \$18.9 million) ["Regulatory Asset C"].

Plan revenues will first be applied to amortize the remaining balance of Regulatory Asset A. Any remaining plan revenues will be used to supplement the \$3.5 million authorized annual accrual to Gulf Power's accumulated provision for property insurance ("Property Insurance Reserve") until a balance of at least \$12 million is achieved. If any additional plan revenues remain after Regulatory Asset A is fully amortized and a balance of at least \$12 million in the Property Insurance Reserve has been achieved, such remaining plan revenues will be applied first to amortize Regulatory Asset B and thereafter to amortize Regulatory Asset C. If any additional plan revenues remain after these two regulatory assets have been fully amortized, then such remaining plan revenues will be utilized first to further supplement the authorized annual accrual to the Property Insurance Reserve until a balance of at least \$25 million has been achieved³ and thereafter to amortize any additional regulatory assets as may be approved by the Commission.

³In Order No. PSC-96-1334-FOF-EI, the Commission established a target of \$25 million to \$36 million for Gulf Power's Property Insurance Reserve based on a study that had been requested the Commission for its review.

In exchange for the foregoing, in recognition of the Company's superior performance on key customer service indicators noted in paragraph 3 of the petition, and as an incentive to achieve even further efficiencies in operations of the Company, the Company's shareholders will be entitled to receive the remaining 40% share of actual revenues contributing to earnings above 12.8% up to a net earned jurisdictional return of 14.3% (measured after sharing).

The full amount of any revenues contributing to earnings above a net earned jurisdictional return of 14.3% (measured after sharing) will be deferred for use as directed by the Commission. The Commission will retain jurisdiction over all such deferred revenues.

6. The calculations of the actual jurisdictional ROE for calendar years 1999, 2000 and 2001 will be on an "FPSC Adjusted Basis" using the adjustments approved in Gulf Power's last full base rate proceeding as amended by this plan. Except as noted in the preceding sentence, all actual reasonable and prudent expenses and investment related to Gulf's retail electric jurisdiction will be allowed in the calculation and no annualized or proforma adjustments will be made.
7. The calendar year surveillance reports for 1999, 2000, and 2001 on which the sharing calculations will be based will continue to be filed no later than February 15 of the year following each plan year and will be subject to audit by the FPSC Staff and true-up consistent with paragraph 6 above. The FPSC Staff will attempt to complete its audit, review and Staff Recommendation no later than June 1 following the close of the calendar year under review to facilitate the finalization of the sharing process.
8. The jurisdictional separation factors to be utilized in the surveillance report calculations referred to in paragraph 6 above will continue to be those developed in the cost of service study used in Gulf's last full base rate adjustment proceeding (Docket 891345-EI).
9. Any revenues deferred pending Commission approval as to final disposition will accrue interest at the 30-day commercial paper rate as specified in Rule 25-6.109, Florida Administrative Code. Such deferred revenues will be assigned a cost rate in the determination of the cost of capital based on the rate used in the interest accrual for deferred balances consistent with the Commission's decision on this issue in Docket No. 950379-EI for Tampa Electric Company.

Attachment "B"

Table B-1

Residential Rate Comparison per 1000 kWh (per JEA Survey)					
	Dec-94	Dec-95	Dec-96	Dec-97	Dec-98 ^A
FPC	87.65	87.19	88.25	85.51	88.94
FP&L	72.86	76.96	80.18	72.38	76.40
TECO ^B	80.34	80.12	78.37	78.27	78.02
JEA	67.90	69.15	68.15	68.15	68.15
OUC	77.39	77.47	77.47	77.47	77.47
GULF ^C	72.52	69.25	70.31	67.34	62.06

^ABeginning in 1998, the JEA survey was changed from a monthly survey to a quarterly survey in January, April, July and October of each year. These December rates have been verified and are the same as shown on the October 1998 JEA survey.

^BTECO is not included on the JEA report. The TECO amounts exclude franchise fees, which are included for the other utilities.

^CA breakdown of Gulf's rates shown here is set forth in Table B-2 below. This breakdown helps show the reasons for the decline in the Company's rates.

Table B-2

Gulf Power Company Analysis of Residential Bill for 1,000 kWh - JEA Comparison December 1994 - December 1998						
	Dec 94	Dec 95	Dec 96	Dec 97	Dec 98	'98 to '94 Change
Customer and Energy Charge	\$43.25	\$43.25	\$43.25	\$43.25	\$43.25	\$0.00
Energy Conservation Cost Recovery	0.26	0.26	0.41	0.35	0.20	(0.06)
Environmental Cost Recovery	1.54	1.53	1.24	1.38	1.38	(0.16)
Capacity Cost Recovery	2.24	1.68	1.67	0.54	0.54	(1.70)
Fuel Cost Recovery	22.06	22.37	23.45	21.57	16.46	(5.60)
Franchise Fee	4.32	1.23	1.37	1.29	1.19	(3.13)
Less: Gross Receipts Tax	(1.15)	(1.07)	(1.08)	(1.04)	(0.96)	0.19
Total Bill	\$72.52	\$69.25	\$70.31	\$67.34	\$62.06	(\$10.46)
Breakdown of Increase (Decrease):						
Energy Conservation Cost Recovery		\$0.00	\$0.15	(\$0.06)	(\$0.15)	(\$0.06)
Environmental Cost Recovery		(0.01)	(0.29)	0.14	0.00	(0.16)
Capacity Cost Recovery		(0.56)	(0.01)	(1.13)	0.00	(1.70)
Fuel Cost Recovery ^D		0.31	1.08	(1.88)	(5.11)	(5.60)
Franchise Fee		(3.09)	0.14	(0.08)	(0.10)	(3.13)
Gross Receipts Tax		0.08	(0.01)	0.04	0.08	0.19
Total Increase (Decrease)		(\$3.27)	\$1.06	(\$2.97)	(\$5.28)	(\$10.46)

^DSee Attachment "C" for a discussion of Fuel Cost Reduction Initiatives

Table B-3

Service Unavailability (SAIDI) Annual Minutes of Interruption per Customer from "Review of Electric Service Quality and Reliability – December 1997" ^E					
	1992	1993	1994	1995	1996
FPC	113.48	95.89	106.92	153.64	158.39
FP&L	71.00	82.00	96.00	119.00	134.00
TECO	50.46	53.28	57.48	56.88	52.14
JEA	N/A	N/A	N/A	N/A	N/A
OUC	N/A	N/A	N/A	N/A	N/A
GULF	56.90	53.40	43.20	41.90	38.60

^ELatest published report.

Table B-4

Justified Customer Complaints/Infractions <i>per 1,000 Customers for calendar year per FPSC Reports</i>					
	1994	1995	1996	1997	1998
FPC	0.031	0.142	0.030	0.012	0.010
FP&L	0.149	0.126	0.055	0.040	0.016
TECO	0.035	0.030	0.009	0.008	0.008
JEA	N/A	N/A	N/A	N/A	N/A
OUC	N/A	N/A	N/A	N/A	N/A
GULF	0.029	0.028	0.011	0.003	0.006

Attachment "C"
Fuel Cost Reduction, Reliability and Customer Satisfaction Initiatives

FUEL COST REDUCTION INITIATIVES

Because Gulf has long been aware that fuel is the most significant raw material affecting our price to our customer, we have made numerous concerted efforts to reduce the cost of that fuel.

- **1993 Contract Buyout**

During renegotiations to lower the sulfur content of the Peabody contract to comply with the Clean Air Act Amendments of 1990, Gulf took advantage of the opportunity to suspend and buyout of the Peabody contract for the period July 1, 1993 through June 30, 1994. This represented approximately 1.8 million tons of contract coal and resulted in a fuel cost savings to Gulf's customers of an additional \$14.5 million even after accounting for the replacement fuel costs and the \$16 million suspension or buyout payment.

- **1996 Contract Buyout**

Gulf Power again took the initiative to buyout of the remaining foreign coal portion of the renegotiated Peabody contract. This represented approximately 2 million tons of coal over a two-year period ending February 1998. Again, this allowed Gulf Power to save its customers an additional \$5.2 million in fuel costs even after accounting for the cost of replacement fuel and the \$22 million buyout payment.

- **Market Re-opener**

Through a series of negotiations, contract amendments and buyout agreements, Gulf Power was able to incorporate and refine the concept of market price review into its long-term contract with Peabody Coalsales Company. The first of these reviews became effective in February 1998. This process established an attractive new market price for approximately 32% of Gulf's 1999 coal supply (1.9 million tons/yr.) at a price reduction of over \$18/ton f.o.b. This amounts to an annual cost savings of \$26 million, based on a new delivered cost of \$1.43/mmbtu versus the pre-reviewed delivered price of over \$2.00/mmbtu.

- **Flexibility**

The ratio of committed (long term) to uncommitted (spot) coal tonnage was reduced over the past few years from a traditional 80/20 strategy. The approximate ratio for Gulf in 1998 was 50/50. The higher percentage of spot coal increased supply flexibility and allowed Gulf to take advantage of market conditions, resulting in lower fuel costs.

- **Increased Competition**

Gulf Power was able to enhance competition among its traditional suppliers by economically introducing various foreign spot coals to its supply mix at plant Crist. Also, the successful utilization of low cost Powder River Basin coal from the Western U.S. at plants Daniel and Scherer increased competition among coal source regions.

- **Changing Fuel Sources**

In 1995, Plant Daniel switched from year round eastern bituminous coal to a seasonal program utilizing Powder River Basin (PRB) and western bituminous coal. In 1996, a decision was made to burn 100% PRB at Plant Daniel. These programs resulted in significant fuel cost savings to Gulf Power customers.

- **Emission Allowances**

Gulf implemented a proactive program for compliance with the Clean Air Act Amendments of 1990. Without paying any added premiums, Gulf burned lower sulfur coal than required under the Act, and built a "bank of SO₂ allowances" for the benefit and use of current and future ratepayers. This bank insures Gulf Power customers are not and will not be subject to the price volatility of the SO₂ emission credit market.

RELIABILITY INITIATIVES

The quality of service provided by our power delivery system is determined by the accumulation of design, construction, operation and maintenance over the life of the facilities providing that service. Documented here are the following four programs that make a significant contribution to the improved reliability and thereby value of the electric service provided to our customers:

- Distribution Trouble Reporting System (DTR)
- Total Quality Management (TQM)
- Trouble Call Management System (TCMS)
- Automated Resource Management System (ARMS)

- **Distribution Trouble Reporting System (DTR)**

This system was developed twenty (20) years ago and has served Gulf Power Company well. The data collected for this system is stored to and retrieved from our mainframe computer. Timekeepers or distribution control operators manually enter trouble tickets into the system. Customer outage numbers are based on estimates from the line crews or distribution control operators. Reports are produced monthly in a paper format.

The reports show trends and identify problem areas. The DTR system produces the following reports: Summary, Recurring Outages, Outages by Cause, and Outages by Circuit Number. The Summary provides information on the data for the Current Month, Current Twelve (12) Months, Previous Twelve (12) Months, Six (6) Year Average, Customer Minutes of Interruption, CAIDI (Customer Average Interruption Duration Index), and the Reliability Index. SAIFI (System Average Interruption Frequency Index) can be calculated from the current data provided in DTR. These reports are sent to the field areas for evaluation and problem correction.

This system was unique for its time because every protective device on the distribution system was numbered in a grid coordinated system all the way to the transformer fuse serving the individual customer. For over twenty (20) years Gulf Power Company has benefitted from this diagnostic tool which reported and summarized distribution outages down to the individual customer level. Our Worst Case Feeder Report is also an adaptation of the DTR allowing us to prioritize our expenditures for improving the worst feeder problems. The diagnostic and reporting functions of the DTR have carried over into and are now performed by the new Trouble Call Management System described later in this document.

- **Total Quality Management (TQM)**

The TQM process implemented by Gulf Power Company in 1992 contributed to the Company's significant progress in improving reliability for our customers. Results were evident in terms of reduced numbers of outages and reduced customer minutes of interruption. The focus on serving our customers continued in the first two years by training a critical mass of employees on forty-two (42) project teams in the use of problem solving and process improvement tools to address customer reliability issues. The process used to select projects strongly supported a positive impact on reliability. In 1992, the first year of the process, some of the project teams focused on the power delivery systems that directly impact reliability. Specific issues successfully addressed by these first teams included momentary outages, sustained outages, transmission outages, and underground outages. In 1993, the Line Equipment, Hardware, and Construction Practices Team used the input from the 1992-team efforts to review the materials used in line construction to further improve reliability. The Company made significant progress in reducing the variation in materials and processes used to serve customers. In 1998, a

process improvement team built on these results by studying the dispatch process. The recommendations approved from this team are expected to improve our future response time when reliability issues do occur.

In summary, Gulf Power Company's strong record in improving service reliability for our customers has its foundations in our focus on quality. We are proud of the impact on our customers of these uniquely positive results.

- **Trouble Call Management System (TCMS)**

TCMS is a client/server application designed to aid Distribution Control Center personnel in analysis of distribution system outages based on customer calls. It works in concert with Gulf Power's Florida Automated Mapping System (FAMS), and Southern Company's Customer Service System (CSS). TCMS builds a model of the distribution system in a database from FAMS data. The model is built with such detail as to include transformers serving customers, all switches, conductors, and feeder breakers. In CSS, each customer's record includes a transformer number that identifies the transformer that serves the customer. Should the customer report a problem, CSS will transmit the customer's transformer number along with the trouble information to TCMS. TCMS can then pinpoint the exact location of the trouble call. If other customers are involved in the same outage, TCMS will group those customers' calls under a common protective device such as a fuse, line recloser, or feeder breaker. TCMS also allows the Distribution Control Center to communicate the status of the outage to the customer via CSS.

Major benefits of TCMS are:

- Decreased trouble analysis time
- Improved dispatch time
- Improved communications to the customer
- Improved customer satisfaction
- Increased productivity of field personnel
- Increased productivity of dispatchers

- **Automated Resource Management System (ARMS)**

ARMS is composed of three distinct parts: a dispatch workstation, a digital wireless communications system, and a vehicle/field computer. The wireless communications system links field resources to dispatch operations. Using the dispatch workstation, field orders placed by customers through the customer call center can be transmitted to the service vehicle workstation (laptop computer) operated by a Gulf Power service crew. Orders may also be electronically transferred from one crew to another, thus maximizing our resources. The primary purpose of ARMS is to streamline management and tracking

processes, and improve field productivity and communications, and provide more timely service to the customer. Gulf Power currently has ARMS implemented in Pensacola, Gulf Breeze, and Milton. Plans for expansion to the remainder of Gulf Power's service territory are underway.

Major benefits of ARMS are:

- Improved customer service
- Increased productivity of field personnel
- Increased productivity of office staff
- Increased productivity of dispatchers
- Increased personnel safety
- Reduced costs

These are only four (4) of a multitude of initiatives undertaken by Gulf Power Company which are designed to improve the quality of service received by our customers. They demonstrate our past, present and future commitment to providing electric service of the highest value.

CUSTOMER SATISFACTION INITIATIVES

Customer Satisfaction is a very high priority at Gulf Power. For many years Customer Satisfaction has been a corporate goal and has been in the performance plans of employees from the executive level to the front line customer service representative.

- **Customer Satisfaction and Value**

In a nationwide Benchmark Survey performed annually by TQS Research, Inc. and National Family Opinion, Gulf Power has consistently been an industry leader in measures of customer satisfaction, price competitiveness and perceived value. This comprehensive survey of residential, general business and large account customers is used by major utilities across the country to gain a better understanding of how they perform against customer expectations. Based on results of the most recent 1998 Benchmark Survey, Gulf Power's ranking among utilities is shown below for the key measures of customer satisfaction and value. The customer satisfaction measure is based on customer responses to a single question, while the perceived value measure is a more comprehensive, statistically derived measure that is based on customer responses to several questions.

	<u>Gulf Power Ranking Among Utilities</u>	
	<u>Overall Satisfaction</u>	<u>Perceived Value</u>
Residential	6 th out of 21 leading utilities	5 th out of 21 leading utilities
General Business	3 rd out of 21 leading utilities	2 nd out of 21 leading utilities
Large Accounts	2 nd out of 88 utilities	4 th out of 88 utilities

A detailed analysis of the study is done to identify weaknesses and to better understand customer expectations. Initiatives and action plans are then developed to improve those areas where our customers indicate improvement is desired.

Our customer service employees must pass a rigorous screening process developed by EEI which measures the applicants "Can Do" and "Will Do" abilities. Our employees receive extensive training and are then empowered to meet the customer's expectation. In 1997, 96% of the customer service representatives responded positively when asked if they have the decision making authority to be responsive to their customers.

- **Compliance**

Gulf Power employees are dedicated to complying with the FPSC Rules, Company Tariffs and Company Policies. Should we make a mistake we accept responsibility, apologize and correct the mistake. In the last three years Gulf has had only a total of 5 infractions and all have been minor in nature as follows:

- Two resulted from drop-box payments being posted in error
- One resulted when a customer on budget billing transferred and the deferred balance caused a disconnect notice to be generated
- One involved a final bill dispute between roommates
- One resulted when a work crew failed to notify a residential customer that the transformer serving his home would be out of service for a short time

- **World Class Commitment**

In 1991 Gulf Power developed a Customer Service Commitment Policy and established levels of service for a number of items. In 1998 we again reviewed the Commitment Policy and recognized the importance of maintaining the Policy. Over the years we have added new technologies and changed our work methods to insure we can meet the commitments detailed in the Policy. In 1997 we converted to a new Customer Service System. We also implemented the Automated Resource Management System in the Pensacola geographical area. In the late 1980's we changed from 2-man service crews to 1-man service crews. Such changes allow us to meet the commitments and also keep our costs at a reasonable level.

- **Customer Service Center**

Gulf recognizes the value and the importance of being available when the customer needs us. In the mid 1990s we centralized our telephone inquiry resources and established our Customer Service Center (CSC). We began with 36 representatives and have grown to 51 today and operate 24 hours a day, every day. We are committed to meeting a service level of 80% of all calls answered in 30 seconds; however, our primary goal is quality service on an individual basis. The performance plans of the CSC representatives do not even mention quantity of calls handled as a job requirement. We only ask them to be available and to handle each call in a way to insure a high level of customer satisfaction.

Attachment "D"
Analysis of Differences Between Utilities

The starting point for the Company's analysis is a midpoint of 11.2% ROE as the most recent indication of an ROE that may have been acceptable to the FPSC under today's market conditions.¹ As will be discussed later in this document, based on recent trends across the nation 11.2% as a starting point or baseline from which to determine an appropriate ROE midpoint is probably low. Nevertheless, the Company has chosen 11.2% as the starting point of its analysis for this proposal. The remainder of this discussion focuses on the key points of difference between Gulf Power and other Florida electric utilities in terms of leverage, electric rates, reliability, customer complaints and business risk. The premise of this discussion is that differences between utilities should be reflected in differences in the authorized ROE for those utilities. Using 11.2% as a starting point, the discussion that follows shows how such differences clearly justify adding basis points to the baseline in order to reach, at a minimum, 11.8% as a reasonable midpoint ROE for Gulf Power. The points that follow demonstrate that authorized ROE is not a matter that is suited to "cookie cutter" solutions:

1. There are differences between utilities in the amount of leverage in their respective capital structures. For example, Gulf Power's 1997 equity ratio is 49 percent, compared to 63 percent for Florida's largest electric utility, a difference of 14 percentage points. The Commission has recently discussed setting a cap on the equity ratio of Florida's largest electric utility at 55.83 percent (after adjusting for off-balance sheet obligations). This figure was based on that utility's 1998 projected Rate of Return Report. Gulf's comparable equity ratio (adjusted for off-balance sheet obligations) is 49.08 percent, a difference of 6.75 percentage points.

In the mid 1980s, the Florida Public Service Commission requested that Dr. Eugene F. Brigham (Public Utility Research Center at the University of Florida) conduct a study examining what impact the amount of leverage in a utility's capital structure had on its cost of equity. The June 30, 1986 study found that the cost of equity for an electric utility changed by an average of 12 basis points for each percentage point change in the common equity ratio for those companies within the 40 to 50 percent equity ratio range.

In 1998, Dr. James H. Vander Weide, Professor of Finance and Economics at Duke University and President of Financial Strategy Associates also performed a study covering the same topic as the June 30, 1986 study by Dr. Brigham. As shown in the

¹The Commission recently approved 11.2% as the midpoint ROE for Florida's largest electric utility as part of a proposed settlement. (See Order No. PSC-98-1748-FOF-EI, issued 12/22/98 in Docket No. 981390-EI) Although the proposed settlement was protested by various customer groups and was ultimately withdrawn by the utility, the 11.2% midpoint that was initially approved by the Commission is used as a starting point for this discussion.

affidavit set forth in Exhibit D-1, Dr. Vander Weide concludes that for each one percent change in the leverage in an electric utility's capital structure, the cost of equity increases by approximately 7 basis points.

Based on the separate studies conducted by Dr. Brigham and by Dr. Vander Weide, Gulf's authorized ROE should be adjusted 47 basis points higher than the assumed 11.2% baseline starting point just to account for the difference in equity ratios.

$$(55.83 - 49.08) * 7 = 47.25$$

2. Table B-1 of Attachment "B" shows that the December 1998 cost of 1000 kWh for Florida's largest electric utility is \$76.40 compared to Gulf's cost of \$62.06, a difference of 23 percent. Excluding Gulf Power, the \$76.40 cost for Florida's largest electric utility is the lowest among the four investor-owned electric utilities shown in Table B-1 of Attachment "B". Also, Gulf's cost of \$62.06 is the 58th lowest of the 60 utilities included in the October 1998 JEA survey. The published 1997 retail rates show the average cost of Florida's largest electric utility to be 7.40 cents/kWh compared to Gulf's cost of 5.84 cents/kWh, a difference of 26.71 percent. (It is important to look at trends in relative levels of performance for rates and other indicators as opposed to a one or two year snapshot. The trends in residential rates per 1000 kWh for the 5-year period 1994-1998 are shown on Attachment "B" above. Gulf has also achieved comparable competitive price advantages in the commercial and industrial sectors.)
3. Certain indicators over 5 year periods ("Annual Minutes of Interruption per Customer" and "Justified Customer Complaints/Infractions per 1,000 Customers") show that Gulf's reliability and quality of service is substantially better than the average Florida electric utility.²

The annual minutes of interruptions per customer in 1996 (the most recent data published by the FPSC) were 38.60 for Gulf compared to a range of 134.00 to 158.39 for Florida's two largest electric utilities.

The number of justified complaints to the Commission regarding Gulf Power for calendar year 1998 was 0.006 per 1000 customers compared to a range of 0.010 to 0.016 for Florida's two largest electric utilities. In previous years, the differences between companies were even more dramatic on a per 1,000 customer basis.

²See Attachment "B" above for the most recent published data on the reliability and justified customer complaint indicators for the time frames indicated. As was previously noted with regard to comparison of utility rates, it is important to look at trends in relative levels of performance for these indicators as opposed to a one or two year snapshot.

4. Gulf Power faces substantially more business risk than other Florida utilities due to Gulf's greater reliance on sales to the industrial sector. For example:

Industrial kWh Sales/
Total Retail Sales
(for the 12 months ended 12/31/97)

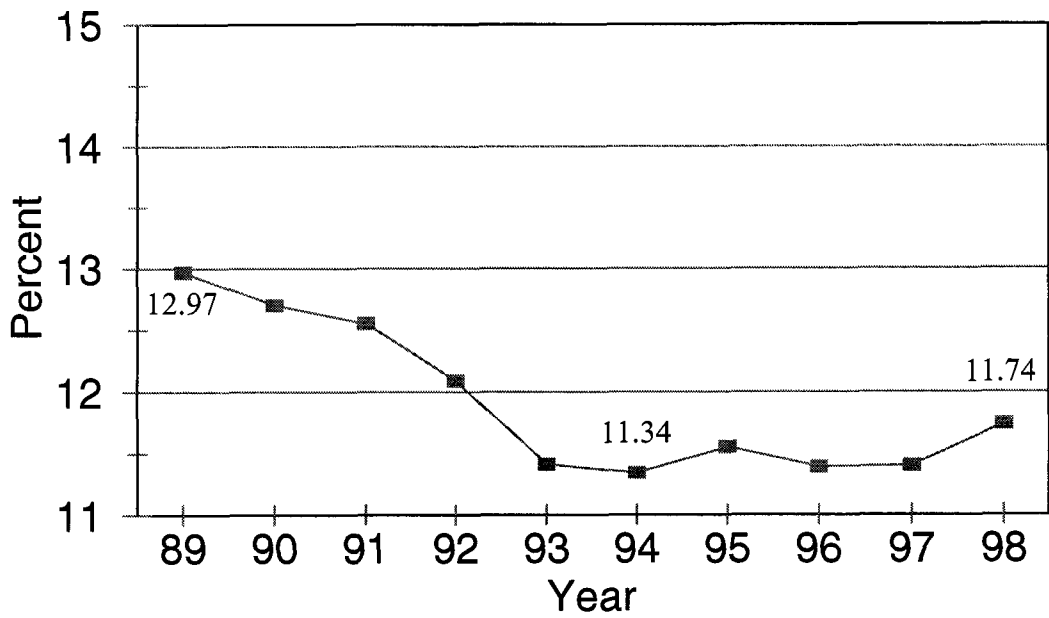
Gulf Power Company	21.29%
Florida's largest electric utility	4.88%

Of course, the risk that an industrial customer will choose to self generate, close its doors, relocate outside of the area served by Gulf Power, or otherwise reduce its requirements for electricity from Gulf Power is much greater than that for residential customers.

Another factor in the increased business risk faced by Gulf Power as compared to other Florida electric utilities is the dominance of the U. S. Military in the economy of the area served by Gulf Power Company. In Northwest Florida, direct military employment, uniformed and civilian, totaled approximately 55,000 individuals or approximately 48 percent of Florida's total. Total military wages in Northwest Florida amounted to \$2.0 billion or 52 percent of the state's total. In a study commissioned by the Governor's Office of Trade and Tourism and Economic Development, it is estimated that the total impact of military installations in Northwest Florida is \$11.1 billion or 56 percent of the total for Florida (\$19.9 billion). Gulf Power's electricity sales to the U. S. Military accounts for almost 40 percent of all industrial sales for the Company and nearly 8 percent of Gulf Power's total retail sales. This economic dominance of the military in the area served by Gulf Power makes the Company more vulnerable than other utilities in regards to possible base realignment and closure and consequential reduction in revenue to Gulf Power.

Based on the differences between utilities discussed above, Gulf's authorized ROE should be higher than the authorized ROE for other Florida electric utilities. In addition to the 47 basis point adjustment quantified in paragraph 1 above for the difference in leverage, the differences between utilities discussed in paragraphs 2, 3 and 4 also justify additional incremental increases above a baseline ROE when establishing the authorized ROE for Gulf Power. Although the value of these individual items would be more difficult to quantify than the matters discussed in paragraph 1, Gulf's proposed midpoint ROE assigns a modest value to the items in total. In order to evaluate the reasonableness of its proposal, Gulf has examined recent trends in returns authorized for electric utilities across the nation. According to a January 1999 report entitled "Major Rate Case Decisions January 1990 - December 1998" produced by Regulatory Research Associates, Inc. ("RRA"), equity returns authorized for electric utilities across the nation averaged approximately 11.7% in 1998 compared to 11.4% in 1996 and 1997. The ROE decisions summarized in the RRA report during the fourth quarter of 1998 averaged 12.03%. The following chart shows that the average authorized returns on equity established in 1998 have turned up when compared to the returns authorized during the 1993 to 1997 time frame.

ELECTRIC UTILITIES Average Authorized Return on Equity



Source: Regulatory Research Associates, Inc.

It is also important to note the volatility in long-term interest rates, in that the yield on 30-year treasury bonds was 4.72 on October 5, 1998 and increased by 93 basis points to 5.65 on February 25, 1999, less than five months later.

Financial Strategy Associates
James H. Vander Weide, Ph.D.

3606 Stoneybrook Drive
Durham, NC 27705

Tel: (919) 383-6659 or (919) 383-1057
Fax: (919) 383-6659
e-mail: jim.vanderweide@duke.edu

EXHIBIT D-1
Page 1 of 4

February 24, 1999

Mr. Arlan Scarbrough, Vice President of Finance
Gulf Power Company
One Energy Place
Pensacola, FL 32520

Dear Mr. Scarbrough:


At your request, I have attached a copy of a study that I performed as part of my cost of equity testimony for Southern Company's recent filing at the Federal Energy Regulatory Commission. My study examines the effect of capital structure changes on the cost of equity for utilities.

As outlined in my testimony, a recommended rate of return on common equity is developed in the context of investors' opinions regarding a company's business and financial risk. Investors' opinions of a company's financial risk depend in part on the company's capital structure. In other words, there is a fundamental relationship between the development of a recommended return on equity and the capital structure to which that return is applied.

An investment in a company with a higher equity ratio and lower debt ratio is less risky than an investment in a more highly-leveraged company. Recognizing that risk increases with increasing leverage, investors require a somewhat lower return on equity for the less leveraged company. Since the capital structure for Gulf Power Company is more highly leveraged than that of Florida Power & Light, using the recommended return on equity for FPL understates the appropriate return for Gulf. Thus, any return on equity developed for Gulf using data for FPL would have to be adjusted upward to correct this mismatch.

In order to adjust for the mismatch between FPL's capital structure and the more highly leveraged capital structure of Gulf, I would apply the results of my empirical study of the relationship between a company's cost of equity and its book value capital structure to determine how the cost of equity is affected by changes in book value capital. My study reveals that the cost of equity for electric companies increases by seven basis points for each one percent increase in the percentage of debt in a company's book value capital structure.

Yours truly,



James H. Vander Weide, Ph.D.
President, Financial Strategy Associates

**Effect of Capital Structure Changes
on the Cost of Equity**

As part of my cost of equity analysis for Southern Company, I have examined the relationship between the level of debt in a company's capital structure and a company's cost of equity, basing my analysis on the Capital Asset Pricing Model ("CAPM"). I applied the CAPM to the companies in my electric proxy group. I determined the cost of debt at various capital structures and interest coverage ratios using rating agency criteria and yield spreads over long-term Treasury bonds. I first unlevered the Value Line betas for each company in the study using the company's current capital structure according to the following formula:

$$\beta_U = \beta_L \div [1 + (1 - t)(D/E)],$$

where β_U is the unlevered, or asset, beta, β_L is the levered, or equity beta, and t, D, and E are the marginal tax rate and target market value levels of debt and equity. The unlevered betas were then relevered for the study capital structures, which assume debt ratios ranging from 0% to 70%, using the formula:

$$\beta_L = \beta_U * [(D/E) * (1-t) + 1]$$

Using the relevered betas, I then calculated the cost of equity using the CAPM model for each of the study capital structures. For this study, I used a risk-free rate of 5.5 percent and a market risk premium of 7.8 percent.

A step by step example using Dominion Resources as the study company follows. Dominion's current Value Line Beta is 0.65, its debt ratio is 50.04%, and its tax rate is 38.6%. Using these values in the unlevering formula yields Dominion's unlevered beta of 0.40 as shown below.

$$\begin{aligned} \beta_U &= 0.65 \div [1 + (1 - 38.6\%) * (50.04\%/49.96\%)] \\ &= 0.40 \end{aligned}$$

This unlevered beta is then used to find the levered beta, and thus cost of equity, at capital structures containing from zero percent to 70 percent debt.

Study Debt Ratio	Relevered Beta	Cost of Equity Using CAPM
35%	Beta = 0.40 * [(35%/65%) * (1-38.6%) + 1] = 0.54	COE = 5.5% + 0.61 * 7.8% = 9.68%
40%	Beta = 0.40 * [(40%/60%) * (1-38.6%) + 1] = 0.57	COE = 5.5% + 0.65 * 7.8% = 9.92%
45%	Beta = 0.40 * [(45%/55%) * (1-38.6%) + 1] = 0.60	COE = 5.5% + 0.69 * 7.8% = 10.22%
50%	Beta = 0.40 * [(50%/50%) * (1-38.6%) + 1] = 0.60	COE = 5.5% + 0.74 * 7.8% = 10.57%
55%	Beta = 0.40 * [(55%/45%) * (1-38.6%) + 1] = 0.65	COE = 5.5% + 0.81 * 7.8% = 11.00%

As shown in the accompanying table, at typical electric company capital structure levels containing 35 percent to 45 percent debt on a market value basis, which correspond to 47 percent to 57 percent debt on a book value basis, for each one percent change in the leverage in the capital structure, the cost of equity increases by approximately 7 basis points.

Company Name	Cost of Equity			Change in Cost of Equity Per 5% Increase in Debt		Basis Point Change for 1% Increase in Debt	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	35%	40%	45%	35%-40%	40%-45%	35%-40%	40%-45%
			=(2) - (1)	=(3) - (2)	=(4) / 5	(5) / 5	
Ameren	10.75%	11.07%	11.43%	0.32%	0.36%	6.4	7.2
Balt. Gas & Elec.	10.77%	11.08%	11.45%	0.31%	0.37%	6.2	7.4
Bec Energy	10.26%	10.54%	10.88%	0.28%	0.34%	5.6	6.8
CILCORP Inc.	10.75%	11.06%	11.57%	0.31%	0.51%	6.2	10.2
Cinergy Corp.	11.15%	11.48%	11.88%	0.33%	0.40%	6.6	8.0
CMS energy	9.92%	10.18%	10.49%	0.26%	0.31%	5.2	6.2
Dominion Resources	9.68%	9.92%	10.22%	0.24%	0.30%	4.8	6.0
DPL Inc.	11.56%	11.92%	12.35%	0.36%	0.43%	7.2	8.6
DTE Energy	10.96%	11.29%	11.67%	0.33%	0.38%	6.6	7.6
Duke Energy	11.19%	11.52%	11.92%	0.33%	0.40%	6.6	8.0
FirstEnergy	9.92%	10.18%	10.49%	0.26%	0.31%	5.2	6.2
Florida Progress	10.04%	10.30%	10.62%	0.26%	0.32%	5.2	6.4
GPU Inc.	10.71%	11.02%	11.38%	0.31%	0.36%	6.2	7.2
Hawaiian Elec.	9.73%	9.98%	10.28%	0.25%	0.30%	5.0	6.0
Houston Inds.	11.00%	11.32%	11.71%	0.32%	0.39%	6.4	7.8
IDACORP	10.43%	10.72%	11.07%	0.29%	0.35%	5.8	7.0
LG&E Energy Corp.	10.87%	11.36%	11.90%	0.49%	0.54%	9.8	10.8
MDU resources	11.43%	11.78%	12.20%	0.35%	0.42%	7.0	8.4
Minnesota Power	10.19%	10.47%	10.80%	0.28%	0.33%	5.6	6.6
Montana Power	10.75%	11.06%	11.42%	0.31%	0.36%	6.2	7.2
New England Elec.	10.59%	10.90%	11.25%	0.31%	0.35%	6.2	7.0
Northern States Power	10.97%	11.30%	11.68%	0.33%	0.38%	6.6	7.6
OGE Energy	10.52%	10.82%	11.17%	0.30%	0.35%	6.0	7.0
PacifiCorp	10.05%	10.32%	10.64%	0.27%	0.32%	5.4	6.4
Pinnacle West Capital	10.61%	10.92%	11.27%	0.31%	0.35%	6.2	7.0
Potomac Elec. Power	9.98%	10.25%	10.56%	0.27%	0.31%	5.4	6.2
Public Serv. Enterprise	10.49%	10.78%	11.13%	0.29%	0.35%	5.8	7.0
Puget Sound Energy	10.38%	10.66%	11.00%	0.28%	0.34%	5.6	6.8
Rochester Gas & elec.	10.96%	11.28%	11.66%	0.32%	0.38%	6.4	7.6
SCANA Corp.	11.02%	11.35%	11.74%	0.33%	0.39%	6.6	7.8
Sempra Energy	11.12%	11.45%	11.84%	0.33%	0.39%	6.6	7.8
SIGCORP Inc.	11.61%	11.97%	12.39%	0.36%	0.42%	7.2	8.4
Southern Co.	10.32%	10.61%	10.94%	0.29%	0.33%	5.8	6.6
TECO Energy	11.26%	11.60%	12.00%	0.34%	0.40%	6.8	8.0
Unicom Corp.	10.62%	10.92%	11.28%	0.30%	0.36%	6.0	7.2
UtiliCorp United	10.15%	10.42%	10.75%	0.27%	0.33%	5.4	6.6
Wisconsin Energy	10.52%	10.82%	11.17%	0.30%	0.35%	6.0	7.0
WPS Resources	11.01%	11.34%	11.73%	0.33%	0.39%	6.6	7.8
Average Range						6.2	7.4
Average							6.8

Financial Strategy Associates
James H. Vander Weide, Ph.D.

3606 Stoneybrook Drive
Durham, NC 27705

Tel: (919) 383-6659 or (919) 383-1057
Fax: (919) 383-6659
e-mail: jim.vanderweide@duke.edu

February 24, 1999

Mr. Arlan Scarbrough, Vice President of Finance
Gulf Power Company
One Energy Place
Pensacola, FL 32520

Dear Mr. Scarbrough:

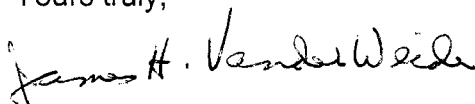
At your request, I have attached a copy of a study that I performed as part of my cost of equity testimony for Southern Company's recent filing at the Federal Energy Regulatory Commission. My study examines the effect of capital structure changes on the cost of equity for utilities.

As outlined in my testimony, a recommended rate of return on common equity is developed in the context of investors' opinions regarding a company's business and financial risk. Investors' opinions of a company's financial risk depend in part on the company's capital structure. In other words, there is a fundamental relationship between the development of a recommended return on equity and the capital structure to which that return is applied.

An investment in a company with a higher equity ratio and lower debt ratio is less risky than an investment in a more highly-leveraged company. Recognizing that risk increases with increasing leverage, investors require a somewhat lower return on equity for the less leveraged company. Since the capital structure for Gulf Power Company is more highly leveraged than that of Florida Power & Light, using the recommended return on equity for FPL understates the appropriate return for Gulf. Thus, any return on equity developed for Gulf using data for FPL would have to be adjusted upward to correct this mismatch.

In order to adjust for the mismatch between FPL's capital structure and the more highly leveraged capital structure of Gulf, I would apply the results of my empirical study of the relationship between a company's cost of equity and its book value capital structure to determine how the cost of equity is affected by changes in book value capital. My study reveals that the cost of equity for electric companies increases by seven basis points for each one percent increase in the percentage of debt in a company's book value capital structure.

Yours truly,



James H. Vander Weide, Ph.D.
President, Financial Strategy Associates

**Effect of Capital Structure Changes
on the Cost of Equity**

As part of my cost of equity analysis for Southern Company, I have examined the relationship between the level of debt in a company's capital structure and a company's cost of equity, basing my analysis on the Capital Asset Pricing Model ("CAPM"). I applied the CAPM to the companies in my electric proxy group. I determined the cost of debt at various capital structures and interest coverage ratios using rating agency criteria and yield spreads over long-term Treasury bonds. I first unlevered the Value Line betas for each company in the study using the company's current capital structure according to the following formula:

$$\beta_U = \beta_L \div [1 + (1 - t)(D/E)],$$

where β_U is the unlevered, or asset, beta, β_L is the levered, or equity beta, and t, D, and E are the marginal tax rate and target market value levels of debt and equity. The unlevered betas were then relevered for the study capital structures, which assume debt ratios ranging from 0% to 70%, using the formula:

$$\beta_L = \beta_U * [(D/E) * (1-t) + 1]$$

Using the relevered betas, I then calculated the cost of equity using the CAPM model for each of the study capital structures. For this study, I used a risk-free rate of 5.5 percent and a market risk premium of 7.8 percent.

A step by step example using Dominion Resources as the study company follows. Dominion's current Value Line Beta is 0.65, its debt ratio is 50.04%, and its tax rate is 38.6%. Using these values in the unlevering formula yields Dominion's unlevered beta of 0.40 as shown below.

$$\begin{aligned} \beta_U &= 0.65 \div [1 + (1 - 38.6\%) * (50.04\%/49.96\%)] \\ &= 0.40 \end{aligned}$$

This unlevered beta is then used to find the levered beta, and thus cost of equity, at capital structures containing from zero percent to 70 percent debt.

Study Debt Ratio	Relevered Beta	Cost of Equity Using CAPM
35%	Beta = 0.40 * [(35%/65%) * (1-38.6%) + 1] = 0.54	COE = 5.5% + 0.61 * 7.8% = 9.68%
40%	Beta = 0.40 * [(40%/60%) * (1-38.6%) + 1] = 0.57	COE = 5.5% + 0.65 * 7.8% = 9.92%
45%	Beta = 0.40 * [(45%/55%) * (1-38.6%) + 1] = 0.60	COE = 5.5% + 0.69 * 7.8% = 10.22%
50%	Beta = 0.40 * [(50%/50%) * (1-38.6%) + 1] = 0.60	COE = 5.5% + 0.74 * 7.8% = 10.57%
55%	Beta = 0.40 * [(55%/45%) * (1-38.6%) + 1] = 0.65	COE = 5.5% + 0.81 * 7.8% = 11.00%

As shown in the accompanying table, at typical electric company capital structure levels containing 35 percent to 45 percent debt on a market value basis, which correspond to 47 percent to 57 percent debt on a book value basis, for each one percent change in the leverage in the capital structure, the cost of equity increases by approximately 7 basis points.

Company Name	Cost of Equity			Change in Cost of Equity Per 5% Increase in Debt		Basis Point Change for 1% Increase in Debt	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	35%	40%	45%	35%-40% =(2) - (1)	40%-45% =(3) - (2)	35%-40% =(4) / 5	40%-45% =(5) / 5
Ameren	10.75%	11.07%	11.43%	0.32%	0.36%	6.4	7.2
Balt. Gas & Elec.	10.77%	11.08%	11.45%	0.31%	0.37%	6.2	7.4
Bec Energy	10.26%	10.54%	10.88%	0.28%	0.34%	5.6	6.8
CILCORP Inc.	10.75%	11.06%	11.57%	0.31%	0.51%	6.2	10.2
Cinergy Corp.	11.15%	11.48%	11.88%	0.33%	0.40%	6.6	8.0
CMS energy	9.92%	10.18%	10.49%	0.26%	0.31%	5.2	6.2
Dominion Resources	9.68%	9.92%	10.22%	0.24%	0.30%	4.8	6.0
DPL Inc.	11.56%	11.92%	12.35%	0.36%	0.43%	7.2	8.6
DTE Energy	10.96%	11.29%	11.67%	0.33%	0.38%	6.6	7.6
Duke Energy	11.19%	11.52%	11.92%	0.33%	0.40%	6.6	8.0
FirstEnergy	9.92%	10.18%	10.49%	0.26%	0.31%	5.2	6.2
Florida Progress	10.04%	10.30%	10.62%	0.26%	0.32%	5.2	6.4
GPU Inc.	10.71%	11.02%	11.38%	0.31%	0.36%	6.2	7.2
Hawaiian Elec.	9.73%	9.98%	10.28%	0.25%	0.30%	5.0	6.0
Houston Inds.	11.00%	11.32%	11.71%	0.32%	0.39%	6.4	7.8
IDACORP	10.43%	10.72%	11.07%	0.29%	0.35%	5.8	7.0
LG&E Energy Corp.	10.87%	11.36%	11.90%	0.49%	0.54%	9.8	10.8
MDU resources	11.43%	11.78%	12.20%	0.35%	0.42%	7.0	8.4
Minnesota Power	10.19%	10.47%	10.80%	0.28%	0.33%	5.6	6.6
Montana Power	10.75%	11.06%	11.42%	0.31%	0.36%	6.2	7.2
New England Elec.	10.59%	10.90%	11.25%	0.31%	0.35%	6.2	7.0
Northern States Power	10.97%	11.30%	11.68%	0.33%	0.38%	6.6	7.6
OGE Energy	10.52%	10.82%	11.17%	0.30%	0.35%	6.0	7.0
PacifiCorp	10.05%	10.32%	10.64%	0.27%	0.32%	5.4	6.4
Pinnacle West Capital	10.61%	10.92%	11.27%	0.31%	0.35%	6.2	7.0
Potomac Elec. Power	9.98%	10.25%	10.56%	0.27%	0.31%	5.4	6.2
Public Serv. Enterprise	10.49%	10.78%	11.13%	0.29%	0.35%	5.8	7.0
Puget Sound Energy	10.38%	10.66%	11.00%	0.28%	0.34%	5.6	6.8
Rochester Gas & elec.	10.96%	11.28%	11.66%	0.32%	0.38%	6.4	7.6
SCANA Corp.	11.02%	11.35%	11.74%	0.33%	0.39%	6.6	7.8
Sempra Energy	11.12%	11.45%	11.84%	0.33%	0.39%	6.6	7.8
SIGCORP Inc.	11.61%	11.97%	12.39%	0.36%	0.42%	7.2	8.4
Southern Co.	10.32%	10.61%	10.94%	0.29%	0.33%	5.8	6.6
TECO Energy	11.26%	11.60%	12.00%	0.34%	0.40%	6.8	8.0
Unicom Corp.	10.62%	10.92%	11.28%	0.30%	0.36%	6.0	7.2
UtiliCorp United	10.15%	10.42%	10.75%	0.27%	0.33%	5.4	6.6
Wisconsin Energy	10.52%	10.82%	11.17%	0.30%	0.35%	6.0	7.0
WPS Resources	11.01%	11.34%	11.73%	0.33%	0.39%	6.6	7.8
Average Range						6.2	7.4
Average							6.8

