

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Gulf Power)
Company for an increase in its)
Docket No.: 891345-EI
rates and charges)
Date filed: 10/18/90

GULF POWER COMPANY'S MOTION FOR STAY AS TO ISSUE 38

Gulf Power Company ("Gulf Power", "Gulf", or "the Company"), by and through its undersigned attorneys, respectfully requests that the Florida Public Service Commission ("Commission" or "FPSC"), enter an order staying the effect of Order No. 23573 as it pertains to Issue 38 in the above docket. As grounds for this Motion, Gulf states:

- 1. Concurrently with the filing of this Motion, Gulf Power has filed a Motion for Reconsideration of Decision Requiring Partial Refund of Interim Rates and a Motion to Sever as to Issue 111. In its Motion to Sever, the Company requests that the Commission sever Issue 111, pertaining to the refund of interim rates collected during the test year, for purposes of reconsideration and that the remaining issues decided in Order No. 23573 be made final and ripe for an immediate appeal to the Supreme Court of Florida.
- 2. Gulf, by this motion, seeks to have the Commission stay the effectiveness of Order No. 23573 as it relates to the imposition of the 50 basis point "mismanagement penalty" sought to be imposed under Issue 38 and have the Commission allow the Company to immediately implement the full amount of rate relief

09342 - 13 L - 2503

deemed reasonable by the Commission, i.e., \$14,131,000, pending the outcome of the expedited appeal.

- 3. Unless a stay is entered as to the effectiveness of the penalty sought to be imposed under Issue 38, a penalty, totalling \$2,293,000 per year for two years, the Company will be immediately and irreparably harmed during the pendency of even an expedited appeal. Gulf has already experienced the detrimental lowering of its first mortgage and pollution control bonds by two rating agencies, Duff & Phelps and Moody's Investor's Service, due to the inadequate revenue increase authorized in this docket, as demonstrated in the Affidavit of Gulf's Vice President-Finance, Arlan E. Scarbrough, attached hereto and incorporated herein as Exhibit A. As Mr. Scarbrough explains, the Company's earnings for 1990 are already inadequate even with the full \$14,131,000 awarded. Imposition of a 50 basis point penalty results in a revenue increase of only \$11,838,000, and will cause further deterioration to Gulf's already precarious financial condition, to the detriment of both the stockholders and the retail ratepayers of Gulf Power Company, as reflected on the attached Exhibit A.
- 4. On September 13, 1990, Gulf placed the \$11,838,000 revenue increase into effect. As stated in the Affidavit of Mr. Scarbrough, each day that passes without the full revenue

increase in effect results in a permanent loss of \$6,300 in revenues to the Company. These revenues, to which even the Commission has agreed that the Company is entitled in the absence of a penalty, will be lost forever to the Company since they cannot be made up in the future. Thus, if Gulf is successful in its appeal of the penalty, it cannot be truly made whole at least with respect to revenues lost during the pendency of the appeal. To the contrary, should the stay be granted and Gulf be allowed to implement the full revenue increase pending resolution of the expedited appeal, the Company will post an appropriate bond or other corporate undertaking. If the Florida Supreme Court affirms the penalty the Commission's purpose will not have been frustrated in the least in that the penalty can be fully imposed at that time. Gulf will make the appropriate refunds, with interest. Simply stated, the Company, its shareholders and ultimately the ratepayers will suffer the irreparable harm described in the Affidavit of Mr. Scarbrough if the stay is not granted. Conversely, no harm will be suffered by the ratepayers or any other party by the granting of this request for a stay.

5. In all equity and fairness, the Company should be allowed the opportunity to earn at least the 12.55 percent return on equity found by the Commission to be fair and reasonable in this docket, pending an appeal as to prospective aspects of the Order including the mismanagement penalty. Even the 12.55 percent return which would be allowed in the absence of the penalty is unrealistically low and does not reflect the true cost of equity, as demonstrated by the Commission's recent decision in Order No. 22490, issued February 5, 1990, in Docket No. 890319-EI, to allow Florida Power & Light the opportunity to earn a midpoint 12.8 percent return on equity. Obviously, in light of the record before the Commission in this Docket and the Commission's own ruling in Order No. 23573 that a 12.55 percent return on equity is reasonable and appropriate, Gulf should be allowed the opportunity to earn at least the full amount of rate relief approved during the pendency of an expedited appeal.

wherefore, Gulf Power Company respectfully requests
that the Commission stay the effectiveness of the fifty basis
point return on equity penalty sought to be imposed under Issue
38 pending an expedited appeal of Order No. 23573 to the Supreme
Court of Florida.

Respectfully submitted

G. EDISON HOLLAND, JR. Florida Bar No. 261599

JEFFREY A. STONE

Florida Bar No. 32593

Beggs & Lane

Post Office Box 12950 Pensacola, Florida 32576

904/432-2451

Attorneys for Gulf Power Co.

AFFIDAVIT

STATE OF FLORIDA
COUNTY OF ESCAMBIA

BEFORE ME, the undersigned authority, personally appeared ARLAN E. SCARBROUGH, who having first been duly sworn, deposes and says:

- I, Arlan E. Scarbrough, am employed in the position of Vice President-Finance at Gulf Power Company (hereinafter "Gulf" or "the Company"), and as such have personal knowledge of the following facts:
- 1. In Order No. 23573, issued October 3, 1990, in Docket No. 891345-EI, the Commission determined that 12.55 percent was a fair rate of return on equity for Gulf, but it further reduced the allowed return by 50 basis points to 12.05 percent for two years as a penalty for alleged "mismanagement."
- 2. Based on an allowed return on equity of
 12.55 percent, the Commission authorized rate relief of
 \$14,131,000--an amount which was reduced to \$11,838,000--after
 imposition of the 50 basis point "mismanagement penalty." Even
 with the full \$14,131,000 in rate relief effective September 13,
 1990, and the interim increase effective March 10, 1990, Gulf's
 projected return on equity for 1990 will only be 10.66 percent
 based on the Commission's order. With the "mismanagement
 penalty" in effect, the Company's return on equity for 1990

will fall even further to 10.53 percent. However, the return on equity which Gulf will really earn, which is based on the investments and expenses included in the filing, is projected to be only 8.74 percent for 1990 with the \$14,131,000 in rate relief. With the "mismanagement penalty" this return would fall to 8.62 percent. All of these projected 1990 returns on equity are significantly below the lowest return on equity supported by testimony at the hearings.

- 3. Compounding the financial distress of the Company, the 12.55 percent authorized return on equity is unreasonably low in comparison to recent Commission decisions and fails to reflect the true cost of equity capital. In order No. 22490, issued by the Commission on February 5, 1990, in Docket No. 890319-EI, the Commission authorized a 12.8 percent rate of return on equity for Florida Power & Light Co. (FP&L). Even though the Commission has previously recognized that, by all relevant standards, Gulf is more risky than FP&L, as reflected on the composite Attachment 1 hereto, the return on equity authorized for Gulf in Docket No. 891345-EI is less than that which was only recently approved for FP&L--a difference which is made even more significant by the imposition of the 50 basis point "mismanagement penalty."
- 4. As further evidence of the immediate adverse financial consequences of the Commission's decision in Docket No. 891345-EI, on August 20, 1990, Duff & Phelps, Inc., lowered its ratings of Gulf's first mortgage bonds by two levels from AA- to A, and preferred stock from A+ to A-. In

reporting this downgrade, Duff & Phelps, Inc., cited the "disappointing rate relief recently allowed" by the FPSC, referring to Docket No. 891345-EI.

- 5. In addition to the events described in paragraph 4 above, on August 24, 1990, Moody's Investors Service downgraded its ratings of Gulf's first mortgage bonds and preferred stock from Al to A2. As was the case with the Duff & Phelps downgrade, Moody's explained the reasons for its action with reference to "an unconstructive rate decision recently issued by the Florida Public Service Commission" in Docket
- the financing costs for Gulf Power Company. In my opinion, the ultimate cost of serving the ratepayer will inevitably increase as a result of the Duff & Phelps and Moody's downgrades which followed the Commission's decision in Docket No. 891345-EI. The increased cost of service will further reduce the Company's earnings, increase the Company's revenue requirements, and force the Company into requesting greater rate relief from this Commission than would otherwise be necessary.
- 7. Implementation of an annual \$2,293,000 penalty for two years for alleged "mismanagement" will cost Gulf nearly \$6,300 per day in lost revenues during each of the first two years the new rates are in effect. These revenues, once lost, cannot be recovered.

- \$50,934,000, representing Gulf's investment in Plant Scherer, and disallowed the expenses associated with this investment. In so doing, the Commission has precluded Gulf from recovering a return on its investment in Plant Scherer which is serving the retail customers and the expenses associated therewith. Gulf's ratepayers continue to enjoy the benefits of this capacity without paying the costs. Denying recovery of these costs has further contributed to the Company's current financial distress.
- 9. Due to the foregoing, Gulf will suffer immediate and irreparable financial harm if the Commission's Order No. 23573 is implemented to impose the 50 basis point "mismanagement penalty" which will reduce the annual rate relief granted from \$14,131,000 to \$11,838,000 during each of the first two years the new rates are in effect.

I hereby swear and affirm that the foregoing facts are true and correct to the best of my knowledge, information and belief.

ARLAN E. SCARBROUGH

Sworn to and subscribed before me this day of etaler , 1990

NOTARY PUBLIC STATE OF FLORIDA

My Commission expires:

Notary Public, State of Florida My Commission Expires March 23, 1991 Bonded Thru Teoy Fain - Insurance Inc.

COMPOSITE ATTACHMENT 1

COMPARABLE RISK OF GULF POWER COMPANY AND FLORIDA POWER AND LIGHT

The Commission and its Staff have consistently recognized that Gulf is a riskier enterprise than is Florida Power and Light Company (FP&L), and have, until now, reflected this finding by authorizing a higher return on equity for Gulf than for FP&L. For instance, in Order No. 20451, issued December 13, 1988 in Docket Nos. 881139-EI (FP&L), 881140-EI (TECO), and 881141-EI (Gulf), the Commission accepted and approved a proposal to utilize a return on equity figure of 13.75 percent for Gulf and only 13.6 percent for TECO and FP&L for the purposes of calculating the utilities' tax savings under Rule 22-14.003 and their respective calculations of AFUDC rates during 1989. In addition, Staff, in its Quarterly Report on Equity Cost Rates, has invariably recognized higher equity cost rates for Gulf than for FP&L. As recently as September 28, 1990, after the Commission had already voted to allow Gulf a 12.55 percent return on equity despite having allowed FP&L a return on equity of 12.8 percent earlier in the year in Order No. 22490, the Staff report reflects that Gulf's cost of equity is 10 basis points higher than that of FP&L. Copies of the Commission Staff's Quarterly Reports from February 14, 1989 through September 28, 1990, are attached hereto and demonstrate Staff's opinion that Gulf's cost of equity for those periods has consistently been higher than that of FP&L.

DEC 1 5 1988

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

GULF POWER COMPANY.

In re: Investigation and show cause) as to why Florida Power & Light) Company should not continue to use) a current market rate of return for application in Rule 25-14.003, F.A.C.) (Tax Rule), Earnings Surveillance,) AFUDC, and Interim Purposes.

DOCKET NO. 881139-EI

國

In re: Investigation and show cause as to why Tampa Electric Company should not continue to use a current rate of return for application in Rule 25-14.003, F.A.C. (Tax Rule), Earnings Surveillance, AFUDC, and Interim Purposes.

DOCKET NO. 881140-EI

In re: Investigation and show cause as to why Gulf Power Company should not continue to use a current rate of return for application in Rule 25-14.003, F.A.C. (Tax Rule), Earnings Surveillance, AFUDC, and Interim Purposes.

DOCKET NO. 881141-EI

ORDER NO. 20451

ISSUED: 12-13-88

The following Commissioners participated in the disposition of this matter:

KATIE NICHOLS, Chairman THOMAS M. BEARD GERALD L. GUNTER JOHN T. HERNDON MICHAEL McK. WILSON

ORDER ACCEPTING REDUCED EQUITY RETURN "HIDPOINTS" FOR APPLICATION IN TAX SAVINGS RULE

BY THE COMMISSION:

As a result of the Tax Reform Act of 1986 the maximum federal corporate income tax rate was reduced from 46 percent to 34 percent. Rule 25-14.003, Florida Administrative Code, (the tax savings rule) allows utilities to keep "tax savings" resulting from reduced corporate income tax rates so long as their retention does not cause the utility's earned rate of return to exceed the "midpoint" of the overall rate of return approved by the Commission in the utility's last rate case. While this midpoint is to be adjusted for the cost of debt issued subsequent to that rate case, the tax savings rule has no provision for adjusting equity returns to reflect current conditions. Since the most recent authorized rates of return on equity for many utilities are higher than might be warranted by current economic and financial conditions. Staff, intervenors and the utilities have attempted to negotiate lower equity rates for use in the tax savings rule.

ORDER NO. 20451 DOCKETS NOS. 881139-EI, 881140-EI & 881141-EI PAGE 2

As is reported in Order No. 17126, negotiations were initially held between Florida Power & Light Company (FPL), Tampa Electric Company (TECO), Gulf Power Company (Gulf), the Office of Public Counsel (Public Counsel), Florida Industrial Power Users Group (FIPUG) and our Staff. Although these negotiations resulted in an impasse, the three electric utilities filed a Stipulation and Proposed Settlement (Proposal) by which they offered to substitute an equity midpoint of 13.8% for calendar year 1987 for the currently authorized returns of 15.6% for FPL and Gulf and 14.5% for Teco. The offer of the 13.8% figure was for the purposes of the tax savings rule only.

We considered the utilities' Proposal at our January 20, 1987 Agenda Conference at which time TECO, FPL and Gulf reduced their offer to 13.6 percent. We accepted the offer as being an improvement over the status quo, and as being in the public interest, while noting that our acceptance of the proposal in no way would prejudice our ability to seek or consider revised equity returns of these three electric utilities for any purpose.

In Order No. 18340, issued in Docket No. 870890-EI on October 26, 1987, we accepted TECO's and FPL's offer to utilize an equity "midpoint" of 13.6 percent for the purposes of the tax savings rule for calendar year 1989 and Gulf's offer to use a rate of 13.75 percent. Additionally, these utilities agreed to use their respective rates for the calculation of their Allowance for Funds Used During Construction (AFUDC) rates for calendar 1988 and as their equity "ceilings" for purposes of the Commission's surveillance reporting system.

For calendar year 1989, FPL, TECO and Gulf have agreed, essentially, to continue the agreement in effect for 1988. Specifically:

- PPL and TECO agree to the utilization of an equity midpoint of 13.6 percent in the calculation of an overall rate of return, pursuant to Rule 25-14.003, Florida Administrative Code (as currently worded), for calendar year 1989;
- Gulf, which has a lower bond rating than FPL and TECO, agrees to the utilization of an equity midpoint of 13.75 percent in the calculation of an overall rate of vature, pursuant to Rule 25-14.003, Florida Administrative Code for calendar year 1989;
- 3. FPL and TECO agree to the use of an equity component of 13.6 percent, and Gulf to 13.75 percent, in the calculation of their respective Allowance for Funds Used During Construction (AFUDC) rates for calendar 1989; and

ORDER NO. 20451 DOCKETS NOS. 881139-EI, 881140-EI & 881141-EI PAGE 3

4. FPL and TECO agree to the use of an equity figure of 13.6 percent, and Gulf to 13.75 percent, as surveillance report ceilings. They agree that earnings above these respective numbers during 1989 could serve as a basis for the Commission to institute show cause proceedings, and, further, that if such proceedings were instituted, earnings above 13.6 percent and 13.75 percent, for the respective companies, could be held subject to refund on a prospective basis.

We accept and approve the utilities' proposal. As we noted in Orders Nos. 17126 and 18340, the three utilities are voluntarily giving up their entitlement to utilize their existing authorised equity returns of 15.6 percent and 14.5 percent for the purposes of the tax savings rule. Whether or not we would find current equity returns lower than those offered by the utilities after considering a proper evidentiary record, the volunteered rates are an improvement over the status quo and, therefore, should be accepted. Importantly, their acceptance in no way prejudices the right of any affected person or the Commission to seek revised equity returns for these three electric utilities for any purpose.

The utilities' offer to utilize lower equity rates in the calculation of their AFUDC rates for 1989 is also an improvement over the <u>status quo</u>, inasmuch as they are currently allowed by rule (Rule 25-6.0141, Florida Administrative Code) to incorporate the "midpoint of the last allowed return on common equity." As mentioned earlier, these rates are 15.6 percent for FPL and Gulf and 14.5 percent for TECO.

The utilities' stipulation that revenues subject to refund during any 1989 show cause proceeding may be calculated using the 13.6 percent and 13.75 percent equity rates is more advantageous to the customers than the interim rate statute (Section 366.071(5), F.S.), which the utilities might rely upon and which provides that revenues collected under bond and held subject to refund shall be calculated using "the maximum of the range of the last authorized rate of return on equity established in the most recent rate case of the public utility." Based upon their currently authorized equity returns, TECO would be entitled to claim a 15.5 percent return for purposes of calculating an interim decrease, while FPL and Gulf could claim 16.6 percent.

In view of the above, it is

ORDERED by the Florida Public Service Commission that the proposal of Florida Power & Light Company, Tampa Electric Company, and Gulf Power Company, as described in the body of this Order, is approved. It is further

ORDERED that these dockets be closed.

ORDER MO. 20451 DOCKETS MOS. 881139-EI, 881140-EI & 881141-EI PAGE 4

By ORDER of the Florida Public Service Commission, this 13th day of DECEMBER . 1988 .

STEVE TRIBBLE, Berector

Division of Records and Reporting

(SEAL)

MBT

MOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.59(4), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Director, Division of Records and Reporting within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water or sewer utility by filing a notice of appeal with the Director, Division of Records and Reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

/- xi.

J.K.

470

14.5

72515

Beth

REMOSANDUK

September 28, 1990

TO:

WALTER D'HAESELEER, DIRECTOR OF COMMUNICATIONS JOE JENKINS, DIRECTOR OF ELECTRIC AND GAS CHUCK HILL, DIRECTOR OF WATER AND SEWER

FROM:

TIM DEVLIN, DIRECTOR OF AUDITING AND FINANCIAL ANALYSIS

RE:

QUARTERLY REPORT ON EQUITY COST RATES

Attached are the results of Staff's analysis regarding utility common equity cost rates and other general information on the state of the economy. The release of this quarter's report was delayed in order for Staff to provide cost of equity estimates which better reflect the financial impact of the crisis in the Middle East. The Cost of Equity Analysis schedule on page 4 is based upon average stock prices for the month of July (before the Iraqi invasion of Kuwait). The Cost of Equity Analysis schedule on page 5 is based upon average stock prices for the month of August (which take the relative decline in the stock market into account). While updated stock price data is received monthly, dividend growth rate data is received quarterly. Unfortunately, the dividend growth data has not been received and therefore is not reflected in these results. It is reasonable to assume that growth expectations have also declined along with the fall in stock prices. To the extent that the updated growth expectations are not reflected in the models, the revised cost of equity results may be upwardly biased.

The Commerce Department released figures which attest that the U.S. economy was already troubled by slowed growth before the Middle East crisis sent the price of oil soaring. Real GNP rose at an annual rate of 0.4% in the second quarter. This rate trailed the 1.7% growth rate in the first quarter of the year and marked the fifth quarter in a row of a growth rate under 2%. Economists generally define a recession as two consecutive quarters of negative growth: Although the economy has weakened substantially over the past year, it has yet to have a negative quarter.

The government also recently announced that the government's principal economic forecasting index was unchanged during July. The flat reading of the index of leading indicators, a collection of 11 sets of economic statistics that are supposed to fore-shadow economic activity six to nine months in the future, followed a 0.1% rise in June and a 0.6% increase in May. Only three of the 11 indicators made positive contributions to the index in July while the other eight factors held the index down. While three consecutive declines in the leading indicators are supposed to signal a recession, the index is notorious for predicting downturns that never occur. For example, after the October 1987 stock market crash the index fell for five straight months but the economy continued to grow at a healthy rate.

Finally, the White House released its budget report as required by the Gramm-Rudman budget law which estimated the 1991 deficit at \$149.4 billion. This means the government must cut the deficit by \$85.4 billion to meet the Gramm-Rudman law's target of \$64 billion for fiscal 1991. If Congress and the White House fail to agree on a budget plan in September, the law's automatic spending cuts will take hold October first. The White House report said the cuts would slash many domestic programs by 32.4% and cut defense spending by 35.3%. The spending cuts are so drastic and the effects on government programs so severe some government officials say Congress and the White House are virtually certain to prevent them from happening. Although the spending cuts are automatic. Congress and the President can cancel the cuts with a simple piece of legislation.

As a closing comment of local interest, Moody's Investors Service lowered the securities ratings of Gulf Fower Company (Gulf), an operating subsidiary of The Southern Company. Moody's downgraded the ratings on Gulf's first mortgage and secured pollution control bonds to A2 from A1, unsecured pollution control bonds to A3 from A2, and preferred stock to A2 from A1.

CC: Chairman Wilson
Commissioner Gunter
Commissioner Easley
Commissioner Beard
Commissioner Messersmith
Dave Swafford
Bill Talbott
John Slemkewicz
Dale Mailhot
Joe McCormick
Marshall Willis
Greg Shafer
Ann Causseaux
Economic Regulation Standards Control

RATE CASE DECISIONS

	BOND			NEW
UTILITY	RATEG	COMMISSION	DATE*	ROE
ELECTRIC				
Control Maine Power	888+	Meino	12/15/89	12.50%
Pacific Gas & Electric	A	California	12/20/89	12.90%
Wisconsin Public Service	AA+	Wisconsin	12/21/89	12.90%
Northern States Power	AA	Wiscousia	12/27/89	12.50%
Wisconsin Electric Power	AA+	Wisconsin	1/11/90	12.90%
Green Mountain Power		Vermont	1/26/90	12.00%
Southwestern Service	AA	Texas	3/7/90	12.50%
Public Service Co. of N.M.	BBB-	New Mexico	4/12/90	12.52%
El Paso Electric Co.	88+	New Mexico	4/12/90	12 60%
Central Hudson Gas & Elec	BBB+	New York	5/21/90	12.10%
Illisois Power Co.	888	Illinois	6/6/90	12.25%
Gulf Power Co.	A	Florida	8/9/90	12.55%
Electric Generic		FERC	7/13/90	12.06%
GAS				
So. Carolina Electric & Gas	A	South Carolina	11/30/89	12.75%
Montana - Dekots Utilities	Α-	Montana	12/8/89	12.50%
Northera Virginia Nat'l Gas		Virginia	12/18/89	13.00%
Pacific Gas & Electric	A	California	12/20/89	12.90%
MGTC, Inc.		Wyoming	12/21/89	12.42%
Wisconsin Public Service	AA+	Wisconsin	12/21/89	12.90%
Northern States Power	AA	Wisconsin	12/27/89	12.50%
Southern California Gas	A+	California	1/9/90	13.00%
No. Indiana Fuel & Light		Indiana	-2/23/90	13.00%
Southern Connecticut Gas	Α-	Connecticut	3/28/90	13.00%
Columbia Ges.of Ohio	:	Ohio	4/5/90	. 12.20%
Chesaposke Utilities :	Α-	Florida	6/6/90	13.00%
TELECOMMUNICATIONS				
GTE Northwest	A	Idaho	. 5/1/89	12.00%
South Central Bell	AAA.	Louisiam	5/30/89	12.75%
Mountain States Tel. & Tel.	AA	Utah	10/18/89	11,80%
Illinois Bell Telephone	- AAA	Illinois	11/9/89	12.76%
US WEST Communications		Oregon	12/29/89	13.53%
Contel of W. Va.		West Virginia	1/5/90	13.23%
Southern Pell	AAA	Georgia	6/28/90	12.38%

^{*} Date of order or decision.

Public Utilities Fortnightly 8/2/90 & 8/16/90 NRRI Quarterly Bulletin, March & June 1990

COST OF EQUITY ANALYSIS AS OF AUGUST 15, 1990

	DISCOUNTED CASH FLOW(1)	EX ANTE RISK PREMIUM(I)	HISTORICAL(2) RISK PREMIUM 10 YEAR AVO	HISTORICAL(2) RISK PREMIUM 20 YEAR AVG
ELECTRIC UTILITIES				
FLORIDA POWER (A43/AA-)	11.3	11.6	13.1	11.6
FPL (A2/A+)	11.4	11.7	13.1	11.6
FPUC	11.9	12.1	13.1	11.6
GULF POWER (A2/A)	11.5	11.7	13.1	11.6
TAMPA ELECTRIC (As2/AA)	11.2	11.5	13.2	11.6
TELEPHONE UTILITIES				
CENTEL (A2/A+)	12.3	12.3	13.1	11.6
GENTEL (A:2/AA-)	12.1	12.1	13.1	11.6
SOUTHERN BELL (Ass/AAA)	11.8	11.8	13.1	11.6
UNITED (As2/A)	12.2	12.2	13.1	11.6
OTHER TELEPHONE UTILIT	IES 12.7	12.7	13.1	11.6
GAS UTILITIES	11.7	12.7	13.1	11.6
WATER AND SEWER TH	e cost of equity obtained using	the current leverage	formula is 11.50% at	100% equity
Apr	1 13.51% at an equity ratio of 4	0% or lower.		-1/
Th	e current leverage formula is:	COE = 10.16 +	(1.34 / Equity Ratio)	

(1) The cost of equity cannot be measured precisely. Analysts use various methods and models to estimate its cost. Staff has used a non-constant growth discounted each flow model and a risk premium analysis to estimate the cost of equity for quarterly report purposes. A consistent and objective appreach ensures that differences in the cost of equity from period to period reflect changing economic conditions and investor expectations. The DCF model and risk premium analysis are sensitive to various input assumptions. A very basic relationship in the risk premium analysis, for example, is the perfect positive correlation between the long-term treasury yield forecast and the estimate of the cost of equity. A 100 basis point change in the forecasted long-term treasury yield results in a 100 basis point change (same direction) in the estimated cost of equity. Similarly, in the DCF analysis a one percentage point change in the dividend growth rate equits in approximately a one percentage point change (same direction) in the estimated cost of equity (holding all other inputs constant). Generally, the variables are interdependent and a change in one variable is accompanied by a change in the other variables. Finally, in a sets proceeding Staff would perform a more thorough analysis of the company and its characteristics relative to the index of companies used to determine the required rate of return as well as the testimony of the parties involved in the case.

⁽²⁾ Based on the data published in the Stocks, Boads, Bills, and Inflation 1990 Yearbook, published by Ibbotson Associates. The historical risk premium reflects the average annual difference between the holding period returns of the S&P 500 stock index and the holding period returns of a 20 year Government Bond. The result shown above reflects a market return. (see page 8)

SUMMARY OF RETURN ON EQUITY ORDERS

ELECTRICS	ORDER	ORDER SUMMARY•
FLORIDA POWER FPL FPUC (Marianna) FPUC (Fernandina) GULF POWER TAMPA ELECTRIC	18627 22490 21532 22224 ** 20451	Rates set at 12.6% with a range of 12.6% to 13.6%. Sets range of 12.3% to 13.3% with a midpt, of 12.8%. Rates set at 13.35%, with a range of 12.35% to 14.35%. Rates set at 12.85%, with a range of 11.85% to 13.85%. Sets range of 11.55% to 13.55% with a midpt, of 12.55%. Rates set at 12.05% for 2 years. In 1989, 13:6% was midpt for overall return, AFUDC, & surveillance. Absent any decision for 1990, the midpt, reverts back to 14.5% for all purposes (Order No. 15451).
TELEPHONES		
ALLTEL CENTEL FLORALA GENTEL GULF INDIANTOWN NORTHEAST QUINCY ST. JOE SOUTHERN BELL SOUTHLAND UNITED GAS	20517 21057 22261 22352 22297 23237 22273 22367 22284 20162 22588 22377	Caps 1988-90 earnings at 14.8%. Sets range of 12.8% to 14.8%, midpt of 13.8%, for all purposes Rate case in progress. ROE of 11.75% for interim purposes. Sets range 4/ 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.3% to 13.3% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Earnings sharing plan. Sets rates at 13.2%, sharing starts at 14%, ceiling after sharing is 16% Sets range of 11.4% to 14.4% with a midpt. of 12.9% for all future purposes. Rate case in progress. Range of 12.3% to 13.3% with a midpt. of 12.8% set for interim only
CHESAPEAKE CITY GAS FLORIDA PUBLIC INDIANTOWN MILLER PEOPLES ST. JOE PALM BCH COUNTY SOUTH FLORIDA SOUTHERN WEST FLORIDA	19793 20636 17933 20636 21054	Rates set at 13.00%, with a range of 12.00% to 14.00%. Rate case in progress. ROE of 14.00% for interim purposes. Rate case in progress. ROE of 13.50% for interim purposes. Sets 13.7% as midpt for tax rule purposes for 1989. Rate case in progress. No interim relief requested. Last approved ROE 14.25%. Sets range of 12.7% to 14.7% with midpt of 13.7% for calculating overearnings & unterim Sets 13.7% as midpt for tax rule purposes for 1989. Rates set at 13.23% with a range of 12.23% to 14.23%. Sets 13.7% as midpt for tax rule purposes for 1989. Rates set at 13.5% with a range of 12.5% to 14.5%.
WATER & SEWER	23318	Established the current leverage formula: COE = 10.16 + (1.34/Equity Ratio) The cost of equity using the formula is 11.50% at 100% equity & 13.51% at 40% equity or lower

^{*} This schedule contains a very brief summary of the order. Copies of the orders can be obtained from the Clerk's office.

^{**} Based on Commission decision, order pending.

MEMORANDUM

May 23, 1990

TO:

WALTER D'HAESELEER, DIRECTOR OF COMMUNICATIONS JOE JENKINS, DIRECTOR OF ELECTRIC AND GAS CHUCK HILL, DIRECTOR OF WATER AND SEWER

FROM:

TIM DEVLIN, DIRECTOR OF AUDITING AND FINANCIAL

ANALYSIS

RE:

QUARTERLY REPORT ON EQUITY COST RATES

Attached are the results of our analysis regarding utility common equity costs for the second quarter of 1990 and other information on the cost of equity.

For the first quarter of 1990, a Wall Street Journal survey showed that company profits fell 18 percent. Company profits were hurt by increased labor costs, higher interest payments and unusually big writeoffs. Many analysts expect earnings to remain soft in the current quarter but to pick up in the second half.

The jobless rate fell to 5.4% in April from 5.2% the previous month, indicating continued weakness in the economy. The increase surprised many analysts because of recent signs the economy was picking up. Many analysts are now predicting that the Federal Reserve will refrain from pushing up interest rates.

Of local interest, Moody's Investor Service lowered its ratings of Florida Power & Light Co. debt. First mortgage and secured pollution control revenue bonds were downgraded

to a rating of A2 from Aa3. Preferred stock was downgraded from Aa3 to A2.

CC: Chairman Wilson
Commissioner Gunter
Commissioner Beard
Commissioner Easley
Dave Swafford
Bill Talbott
John Slemkewicz
Dale Mailhot
Joe McCormick
Marshall Willis
Greg Shafer
Economic Regulation Standards Control

٠,

RATE CASE DECISIONS®

MEM

	DINOS	A Proposition	DATE	ALLOWED
MANAGEMENT	CARRESTO	A A A STATE OF THE PARTY OF THE		
Georgia Poster	800	Georgia	9/27/89	12.25%
Couisiana P & L	00 00 00 00	Louisiana	7/6/89	12.76%
Madison G & E	\$	Wisconsin	7/14/89	13.50%
Montana Power	+ 688	Montana	8/15/89	12.50%
Tucson Electric Power	888	Arizona	68/81/01	12.50%
Western Massachusetts El.	888+	Messechusotts	7/24/89	13.00%
Control Maine Power	888+	Maino	12/15/89	12.50%
Wisconsin Electric Power		Wisconsin	1/11/90	12.90%
Electric Genuise		FERC	4/16/90	11.85%
GAS			00/01/02	NO F
Northern Virginia Ivan		To a Branch	827.C8	12.90%
Wilder Brown		Idaho	9/29/89	12.75%
Maryland Natural Gas Co.		Maryland	8/22/89	12.80%
Columbia Gas Co. of Virginia	888	Virginia	8/23/89	13.25%
Commonwealth Gas	60 60 4	Virginia	68/0/8	13.25%
Wisconsin Natural Gas	*	Winconsin	9/26/89	13.60%
Public Ser Co North Carolina	NR	Morth Caroline	68/11/11	13.20%
MGTC, Inc.		Wyoming	12/21/89	12.42%
TELECOMMUNICATIONS				
GTE Northwest	>	Idaho	5/1/89	12.00%
South Central Bell	AAA	Louisiana	5/30/89	12.75%
Elinois Bell Telephone	AAA	Minois	68/6/11	12.76%
Mountain States Tel. & Tel.	A	Utah	10/18/89	208.11
US WEST Communications		Oregon	12/29/89	13.53%
Contel of W. Va.		West Virginia	1/5/90	13.23%
	The second secon			

ķ.

Public Utilities Fortnighdy 3/15/90 & 4/26/90 NRRI Quarterly Bulletin, Doc. 1989

These allowed returns should be viewed with castion. A close examination reveals the average rating of the utilities listed is "BBB" with some speculative grade changes in capital markets, a more relev companies contained in the chart. In addition, a comparison between the staff's currently recommendations to testimony concurrently filed in other jurisdictions. recommended returns and those allowed by other states may be inappropriate. Given recent ant comparison would be to compare staff's current

[·] Oate of order or decision.

5/23/90

COST OF EQUITY ANALYSIS Second Quarter 1990

12.5

The second secon

	CASH FLOW(I)	EX ANTE BLSK PREMIUM(I)	HISTORICAL(2) RISK FREMUM 10 YEAR AVG	HISTORICAL(2) RISK PREMIUM 20 YEAR AVG	
ELECTRIC UTILITIES	The second secon		AND PERSONS AND ADDRESS OF THE PERSONS AND		
FLORIDA POWER (Aa3/A+)	11.4	60	:3.2	11.7	
FPL (A2/A+)	ווג	6.11	13.2	11.7	
FPUC	12.0	12.4	13.2	11.7	
GULF POWER (A/A)	11.6	12.0	13.2	11.7	1.1
TAMPA ELECTRIC (Asl/AA)	11.3	11.7	13.2	11.7	1
TELEPHONE UTILITIES					*
CENTEL (AJ/A+)	12.1	12.6	13.2	11.7	グル
GENTEL (Ad2/AA-)	11.9	12.3	13.2	11.7	
SOUTHERN BELL (Ass/AAA)	11.5	12.0	13.2	11.7	1
UNITED (A-2/A)	12.0	12.4	13.2	11.7	1
OTHER TELEPHONE UTILITIES	12.5	13.0	13.2	11.7	
GAS UTILITIES	11.9	13.0	13.2	11.7	
WATER AND SEWER The cost of	The cost of equity obtained using the current leverage formula is 11.76% at 100% equity	the current loves	age formula is 11.76	% at 100% equity	
and 13,959	and 13.95% at an equity ratio of 40% or lower	10% or lower.		,	
The curren	The current leverage formula is:	COE = 10.30	COE = 10.30 + (1.46/Equity Ratio)	9)	

(1) The cost of equity cannot be measured precisely. Analysts use various methods & models to estimate its cost. Over the par 3 years we consistent & objective in our application of the models. A consistent & objective approach ensures that differences in the cost of have used a non-constant growth discounted cash flow model & a risk premium analysis to estimate the cost of equity. We try to be Generally, the variables are interdependent and a change in one variable is accompanied by a change in the other variables. approximately a one percentage point change (same direction) in our estimate. estimated cost of equity. Similarly, in our DCF analysis a one percestage point change in the dividend growth rate results in the cost of equity. A 100 basis point change in long-term treasury yields results in a 100 basis point change (same direction) in our premium analysis, for example, is the perfect positive correlation between the long-term treasury yield forecast and our estimate of can affect his result. The risk premium & DCF model are seasitive to various input assumptions. A very basic relationship is our risi cost of equity estimates it is important to understand the rationale underlying the analyst's assumptions and how changing a variable different analysts use the same models, they can arrive at different estimates because of their input assumptions. Thus when comparing equity from period to period reflect changing economic conditions & investor expectations—act a different method. Even when ated cost of equity (holding all other inputs constant)

=

Distinguishes among companies on the basis of bond ratings. In a rate proceeding staff would perform a more thorough analysis of the company and its characteristics relative to the index of companies used to determine the required rate of return

⁽²⁾ Sazad on the data published in the Stocks, Bonds, Bills, and Inflation 1990 Yearbook, published by Ibbotson Associates. The historical period returns of a 20 year Government Bond. The result shown above reflects a market return. (see page 7) risk premium reflects the average annual difference between the holding period returns of the S&P 500 stock index and the holding

For regulatory purposes, the Con sission generally establishes a sudpoint cost of equity with a range of 100 basis points shove and below

SUMMARY OF RETURN ON EQUITY ORDERS

ELECTRICS	ORDER	ORDER SUMMARY .
FLORIDA POWER FPL FPUC (Marianna) FPUC (Fernandina) GULF POWER TAMPA ELECTRIC	18627 22490 21532 22224 20451 20451	Rates set at 12.6% with a range of 12.6% to 13.6%. Sets range of 12.3% to 13.3% with a midpt. of 12.8%. Rates set at 13.35%, with a range of 12.35% to 14.35%. Rates set at 12.85%, with a range of 11.85% to 13.85%. Rate case in progress. In 1989, 13.75% was midpt for overall return, AFUDC, & surveillance. In 1989, 13.6% was midpt for overall return, AFUDC, & surveillance. Absent any docision for 1990, the midpt. reverts back to 14.5% for all purposes.
TELEPHONES		
ALLTEL CENTEL FLORALA GENTEL GULF INDIANTOWN NORTHEAST QUINCY ST. JOE SOUTHERN BELL SOUTHLAND UNITED	20517 21057 22261 22352 22297 21474 22273 22367 22284 20162 22588 22377	Caps 1988-90 earnings at 14.8%. Sets range of 12.8% to 14.8%, midpt of 13.8%, for all purposes. Rate case in progress. Contol's carnings capped at 13.75% for 1989. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Caps carnings at 14.5% for 1988 & 1989. Sets range of 11.4% to 14.4% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Earnings sharing plan. Sets rates at 13.2%, sharing starts at 14%, ceiling after sharing is 16% Sets range of 11.4% to 14.4% with a midpt. of 12.9% for all future purposes. Rate case in progress. Range of 12.3% to 13.3% with a midpt. of 12.8% set for interim only
CENTRAL FLORIDA CITY GAS FLORIDA PUBLIC INDIANTOWN MILLER PEOPLES PLANT CITY ST. JOE PALM BCH COUNTY SOUTH FLORIDA SOUTHERN WEST FLORIDA WATER & SEWER	18716 20636 20258 20636 20636 20636 19793 20636 17933 20636 21054	Rate case in progress. Last authorized set at 13.9% with a range of 12.9% to 14.9% Rate case in progress. In 1989, 13.7% set as midpt for tax rule purposes. Sets 13.5% as midpt for tax rule, AFUDC, and surveillance purposes. Sets 13.7% as midpt for tax rule purposes for 1989. Rate case in progress. In 1989, 13.7% set as midpt for tax rule purposes. Rate case in progress. In 1989, 13.7% was midpoint for tax rule purposes. Sets range of 12.7% to 14.7% with midpt of 13.7% for calculating overcarnings & interim. Sets 13.7% as midpt for tax rule purposes for 1989. Rates set at 13.23% with a range of 12.23% to 14.23%. Sets 13.7% as midpt for tax rule purposes for 1989. Rates set at 13.5% with a range of 12.5% to 14.5%. Established the current leverage formula: COE = 10.3 + (1.46/Equity Ratio) The cost of
		equity using the formula is 11.76% at 100% equity & 13.95% at 40% equity or lower.

This schodule contains a very brief summary of the order. Capies of the orders can be obtained from the Clerk's office.

AVERAGE AUTHORIZED ROE OVER BOND YIELD.

Natural Gas Utilities

			AUTH	Bas SOND			
UTILITY	DOCKET	DATE	ROE	YIELDS**	DUFFER	AVG/BONDS	
West Florida	871255	17-Apr-89	13.50%	10.49%	3.01%	Apr-89	
Geinesville	870688	10-Oct-88	13.30%	10.32%	2.98%	Oct-88	
St. Jos	870986	11-Aug-88	13.70%	11.69%	2.01%	Aug-88	
Central Florida	870118	16-Jan-88	13.90%	11.34%	2.56%	Jan-88	
South Florida	860341	04-Aug-87	13.23%	10.90%	2.33%	Aug-87	
West Florida	850503	05-Sep-86	13.15%	9.96%	3.19%	Sep-86	
Peoples Gas	850811	08,541-86	14.25%	9.69%	4.56%	Jul-86	
FPUC	850172	06-Jun-86	14.50%	10.03%	4.47%	Jun-86	
Southern Ges	840268	25-Apr-85	15.75%	14.11%	1.64%	Apr-85	4
Gainesville	840229	10-Apr-85	15.75%	14.11%	1.64%	Apr-85	
City Gas	830581	22-Aug-84	15.75%	14.79%	0.96%	Aug-84	
Miller	830238	29-F-ds-84	15.75%	14.05%	1.79%	Feb-84	
Peoples Gas	830123	28-Nov-83	15.75%	14.12%	1.63%	Nov-83	
St. Joe	820490	16-Aug-83	16.00%	14.21%	1.79%	Aug-83	
West Florida	820404	11-Jul-83	16.20%	14.01%	2.19%	Jul-83	
FPUC	820249	19-Apr-83	16.04%	14.07%	1.97%	Apr-83	
South Florida	830330	16-Apr-83	15.75%	14.07%	1.68%	Apr-83	
Gainesville	820265	24-Mar-83	16.00%	14.33%	1.67%	Mar-83	
Southern Gas	820182	25-Feb-83	15.50%	14.61%	0.89%	Feb-83	
Palm Beach County	810439	11-Jan-83	16.25%	14.56%	1.69%	Jan-83	
Plant City	820121	19-Nov-82	16.00%	14.81%	1.19%	Nov-82	
Peoples Ges	810302	14-Feb-82	16.00%	17.83%	-1.83%	Feb-82	
Central Florida	810073	19-Jan-82	16.00%	17.83%	-1.83%	Jen-82	
Southern Gas	810056	30-Nov-81	16.00%	16.49%	-0.49%	Nov-81	
City Gas	810004	06-Nov-81	16.00%	16.49%	-0.49%	Nov-81	
Miller	800417	12-May-81	15.50%	16.66%	-1.16%	May-81	
FPUC	800414	20-Apr-81	15.00%	16.14%	-1.14%	Apr-81	

AVERAGE

1.44%

This chart shows the difference between the natural gas utilities authorized
 ROE and the cost of similarly rated utility debt at the time of the Commission's decision.

^{**} Assumed rating.

HISTORICAL RISK PREMIUM STUDY

YEAR	S&P 500*	LT TREAS*	DIFFERENCE
1970	4.0%	12.1%	-8.1%
1971	14.3%	13.2%	1.1%
1972	19.0%	5.7%	13.3%
1973	-14.7%	-1.1%	-13.6%
1974	-26.5%	4.4%	-30.9%
1975	37.2%	9.2%	28.0%
1976	23.8%	16.8%	7.0%
1977	-7.2%	-0.7%	-6.5%
1978	6.6%	-1.2%	7.8%
1979	18.4%	-1.2%	19.6%
1980	32.4%	4.0%	36.4%
1981	-4.9%	1.8%	-6.7%
1982	21.4%	40.3%	-18.9%
1983	22,5%	0.7%	21.8%
1984	6.3%	15.4%	9.1%
1985	32.2%	31.0%	1.2%
1986	18.5%	24.4%	-5.9%
1987	5.2%	-2.7%	7.9%
1988	16.8%	9.7%	7.1%
1989	31.5%	18.1%	13.4%
20 YEAR AVERAGE	12.8%	9.6%	3/2/6
10 YEAR AVERAGE	18.2%	13.5%	4.7%

STOCKS, BONDS, BILLS, AND INFLATION 1990 YEARBOOK EXHIBITS C-1 AND C-

The returns for the S&P 500 and long-term treasuries are one year holding period returns. For example, an investor who bought the S&P 500 Index on January 1, 1987 and sold it on December 31, 1987 would have realized a total return of 5.2%.

MEMORANDUM

April 9, 1990

TO:

WALTER D'HAESELEER, DIRECTOR OF COMMUNICATIONS

JOE JENKINS, DIRECTOR OF ELECTRIC AND GAS CHUCK HILL, DIRECTOR OF WATER AND SEWER

FROM:

TIM DEVLIN, DIRECTOR OF AUDITING AND FINANCIAL

ANALYSIS

RE:

QUARTERLY REPORT ON EQUITY COST RATES

Attached are the results of our analysis regarding utility common equity costs for the first quarter of 1990 and other information on the cost of equity.

cc: Chairman Wilson
Commissioner Gunter
Commissioner Herndon
Commissioner Beard
Commissioner Easley
Dave Swafford
Bill Talbott
John Slemkewicz
Dale Mailhot
Joe McCormick
Marshall Willis
Bill Lowe
Bob Freeman
Economic Regulation Standards Control

RATE CASE DECISIONS®

UTILITY	BOND			NEW
ELECTRIC	RATING	COMMISSION	DATE**	ROE
Georgie Power	200			
Iowa P & L	BBB	Georgia	9/27/89	12.25%
Louisiana P & L	A	Iowa	6/2/89	13.20%
Madison G & E	BBB-	Louisiana	7/6/89	12.76%
Mostana Power	AA	Wisconsin	7/14/89	13.50%
	BBB+	Montena	8/15/89	12.50%
South Carolina Elec & Gas	A+	South Carolina	6/27/89	13.25%
Tucson Electric Power	BBB	Arizona	10/18/89	12.50%
Western Massachusetts El.	B88+	Massachusetts	7/24/89	13.00%
Central Maine Power	888+	Maine	12/15/89	12.50%
Electric Generic		FERC	2/5/90	11.75%
GAS				
Gulf States Utility Co.	BB-	Louisiana	5/30/89	12.00%
Virginia Nat'l Gas Inc	NR	Virginia		13.25%
Connecticut Natural Gas	A-	Connecticut	8/23/89	12.90%
Washington Water Power	A-	Idaho	9/29/89	12.75%
Maryland Natural Gas Co.		Maryland	8/22/89	12.80%
Columbia Gas Co. of Virginia	888	Virginia	8/23/89	13.25%
Commonwealth Gas	BBB+	Virginia	8/3/89	13.25%
Wisconsin Natural Gas	AA	Wisconsin	9/26/89	13.60%
Public Ser Co North Carolina	NR	North Carolina	11/8/89	13.20%
MGTC, Inc.		Wyoming	12/21/90	12.42%
TELECOMMUNICATIONS				
GTE Northwest	A	Idaho	5/1/89	12.00%
South Central Bell	AAA	Louisiana	5/30/89	12.75%
Illinois Bell Telephone	AAA	Illinois	11/9/89	12.76%
Mountain States Tel. & Tel.	AA	Utah	10/18/89	11.80%

These allowed returns should be viewed with caution. A close examination reveals the average rating of the utilities listed is "BBB" with some speculative grade companies contained in the chart. In addition, a comparison between the staff's currently recommended returns and those allowed by other states may be inappropriate. Given recent changes in capital markets, a more relevant comparison would be to compare staff's current recommendations to testimony concurrently filed in other jurisdictions.

Public Utilities Fortnightly 3/15/90 NRRI Quarterly Bulletin, Dec. 1989

^{**} Date of order or decision.

COST OF EQUITY ANALYSIS First Quarter 1990

	DESCOUR CASH FL		EX ANTE* RISK PREMIUM	HISTORICAL. RISK PREMIUM 10 YEAR AVG	HISTORICAL** RISK PREMIUM 20 YEAR AVG
ELECTRIC UTILITIES	1				
FLORIDA POWER (Aa3/A+)	11.3	1	11.7	13.2	10.4
FPL (Aa3/A+)	11.3	11.6ª	11.7	13.2	10.4
FPUC	11.9		12.2	13.2	10.4
GULF POWER (A/A)	11.5		11.8	13.2	10.4
rampa electric (a=1/aa)	11.2		11.5	13.2	10.4
TELEPHONE UTILITIES					
CENTEL (A3(8+)	12.3		12.4	13.2	10.4
SENTEL (As2/AA-)	12.0		12.2	13.2	10.4
SOUTHERN TELE (Ass/AAA)	11.7		11,8	13.2	10.4
JNITED (As2/A)	12.1		12.2	13.2	10.4
OTHER TELEPHONE UTILITIES	12.7		12.8	13.2	10.4
GAS UTILITIES	11.7		12.8	13.2	10.4

WATER AND SEWER

The cost of equity obtained using the current leverage formula is 11.76% at 100% equity and 13.95% at an equity ratio of 40% or lower.

The current leverage formula is: COE = 10.30 + (1.46/Equity Ratio)

- The cost of equity cannot be measured precisely. Analysts use various methods & models to estimate its cost. Over the pair 3 years we have used a non-constant growth discounted cash flow model & a risk premium analysis to estimate the cost of equity. We try to be consistent & objective in our application of the models. A consistent & objective approach ensures that differences in the cost of equity from period to period reflect changing economic conditions & investor expectations—not a different method. Even when different analysts use the same models, they can arrive at different estimates because of their input assumptions. Thus when comparing cost of equity estimates it is important to understand the rationale underlying the analyst's assumptions and how changing a variable can affect his result. The risk premium & DCF model are sensitive to various input assumptions. A very basic relationship in our risk premium analysis, for example, is the perfect positive correlation between the long-term treasury yield forecast and our estimate of the cost of equity. A 100 basis point change in long-term treasury yields results in a 100 basis point change (same direction) in our estimated cost of equity. Similarly, in our DCF analysis a one percentage point change in the dividend growth rate results in approximately a one percentage point change (same direction) in our estimated cost of equity (holding all other inputs constant).
- Distinguishes among companies on the basis of bond ratings. In a rate proceeding staff would perform a more thorough analysis of the company and its characteristics relative to the index of companies used to determine the required rate of return.
- ** Based on the data published in the Stocks, Bonds, Bills, and Inflation 1988 Yearbook, published by Ibbotson Associates. The historical risk premium reflects the average annual difference between the holding period returns of the S&P 500 stock index and the holding period returns of a 20 year Government Bond. The result shows above reflects a market return. (see page 8)
- ***For regulatory purposes, the Commission will establish a midpoint cost of equity with a range of 100 basis points above and below the midpoint.

SUMMARY OF RETURN ON EQUITY ORDERS

ELECTRICS	ORDER	ORDER SUMMARY
FLORIDA POWER FPL FPUC (Marianna) FPUC (Fernandina) GULF POWER TAMPA ELECTRIC	18627 22490 21532 22224 20451 20451	Rates set at 12.6% with a range of 12.6% to 13.6%. Sets range of 12.3% to 13.3% with a midpt. of 12.8%. Rates set at 13.35%, with a range of 12.35% to 14.35%. Rates set at 12.85%, with a range of 11.85% to 13.85%. Rate case in progress. In 1989, 13.75% was midpt for overall return, AFUDC, & surveillance. In 1989, 13.6% was midpt for overall return, AFUDC, & surveillance. Absent any decision for 1990, the midpt. reverts back to 14.5% for all purposes.
TELEPHONES		*
ALLTEL CENTEL FLORALA GENTEL GULF INDIANTOWN NORTHEAST QUINCY ST. JOE SOUTHERN BELL SOUTHLAND UNITED	20517 21057 22261 22352 22297 21474 22273 22367 22284 20162 18957 22377	Caps 1988-90 earnings at 14.8%. Sets range of 12.8% to 14.8%, midpt of 13.8%, for all purposes Rate case in progress. Centel's earnings capped at 13.75% for 1989. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Caps earnings at 14.5% for 1988 & 1989. Sets range of 11.4% to 13.4% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes. Sets range of 12.8% to 14.8% for all purposes. Earnings sharing plan. Sets rates at 13.2%, sharing starts at 14%, ceiling after sharing is 16%. Sets range of 12.8% to 14.8% for all purposes. Rate case in progress. Range of 12.3% to 13.3% with a midpt. of 12.8% set for interim only.
CENTRAL FLORIDA CITY GAS FLORIDA PUBLIC INDIANTOWN MILLER PEOPLES PLANT CITY ST. JOE PALM BCH COUNTY SOUTH FLORIDA SOUTHERN WEST FLORIDA WATER & SEWER	18716 20636 207258 20636 20636 20636 19793 20636 17933 20636 21054	Rate case in progress. Last authorized set at 13.9% with a range of 12.9% to 14.9%. Sets 13.7% as midpt for tax rule purposes for 1989. Sets 13.7% as midpt for tax rule purposes for 1989. MFRs being filed. Sets 13.7% as midpt for tax rule purposes for 1989. Rate case in progress. In 1989, 13.7% was midpoint for tax rule purposes. Sets range of 12.7% to 14.7% with midpt of 13.7% for calculating overcarnings & interim. Sets 13.7% as midpt for tax rule purposes for 1989. Rates set at 13.23% with a range of 12.23% to 14.23%. Sets 13.7% as midpt for tax rule purposes for 1989. Rates set at 13.5% with a range of 12.5% to 14.5%. Established the current leverage formula: COE = 10.3 + (1.46/Equity Ratio). The cost of
- CONSE		equity using the formula is 11.76% at 100% equity & 13.95% at 40% equity or lower.

This schedule contains a very brief summary of the order. Copies of the orders can be obtained from the Clerk's office.

AVERAGE AUTHORIZED ROE OVER BOND YIELD*

Telecommunications

			AUTH	BOND			BOND
UTILITY	DOCKET	DATE	ROE	YIELD	DOFFER	AVG/BONDS	RATING
GTE	870171	29-Dec-89	12.30%	9.26%	3.04%	Dec-89	AA-
Alitel	881135	23-Dec-88	13.80%	10.44%	3.36%	Dec-88	BPB
SBT	880069	13-Oct-88	13.20%	2618	3.59%	Oct-88	AAA
United	880444	26-Jul-88	13.50%	11.04%	2.46%	Jul-88	A
Centel	861361	30-Jun-87	12.75%	10.02%	2.73%	Jun-87	A+
Alitel	850064	05-Feb-86	14.60%	10.74%	3.86%	Feb-86	**B**
Centel	850142	28-Aug-85	14.50%	12.13%	2.37%	Aug-85	A +
Alitel	830471	29-Jun-84	15.15%	15.50%	-0.35%	Jun-84	BBB
SBT	820294	07-Dec-83	15.00%	13.14%	1.86%	Dec-83	AA
United	810211	27-Jul-82	15.75%	16.42%	-0.67%	Jul-82	A
Alitei	810326	07-Jun-82	15.50%	17.21%	-1.71%	Jun-82	3BB**
SBT	810035	15-Dec-81	15.25%	15.23%	0.02%	Dec-81	AA
GTE	810095	07-Dec-81	15.50%	15.23%	0.27%	Dec-81	AA-

AVERAGE

1.60%

This chart shows the difference between five major telephone utilities authorized
 ROE and the cost of similarly rated utility debt at the time of the Commission's decision.

^{**} Assumed rating.

PITEREST RATES

					*******	BLUE CHIP F	ORECAST ***	*****
	***** AN	NUAL AVERA	GES *****	AVERAGE FEB	SECOND	THIRD	POURTH QUARTER	QUARTER 1001CD
	1987(1)	1988(1)	1989(1)	1990(1)	1990(2)	1957(2)	1990(2)	1991(2)
Ass Utility	9.52	10.05	9.32	9.35			2	
As Utility	9.77	10.26	9.56	9.57				
A Utility	10.10	10.49	9.77	9.76	9.6	9.5	9.5	9.5
Bea Utility	10.53	11.00	9.97	9.96				
Prime Rate	8.10	9.44	10.83	10.00	9.9	9.7	9.7	9.7
Commercial Paper (30 day)	6.70	7.72	9.05	8.22	8.0	7.9	7.9	8.0
Long Term Treasury Yield	8.70	9.04	8.51	8.63	8.3	8.2	8.2	8.2

INFLATION RATES (3)

				LATEST	SECOND	BLUE CHIP F THIRD QUARTER	FOURTH OUARTER	FIRST QUARTER
r	1987(4)	NUAL AVERA 1988(4)	GES ***** 1989(4)	ACTUAL (2) 2/22/90	QUARTER 1990(2)	1990(2)	1990(2)	1990(2)
Consumer Price Index	3.7	4.1	4.8	3.9	3.9	4.1	4.2	4.3
GNP Deflator	3.3	3.4	4.2	3.5	3.9	3.9	3.9	4.1

STOCK MARKET PERFORMANCE

	12/31/88	12/29/89	PERCENT	3/15/90	PERCENT CHANGE(5)
S & P 500	277.72	353.4	27.25%	338.07	4.34%
Dow Jones Industrial Average	2168.57	2753.2	26.96%	2695.7	-2.09%
Dow Jones Utility Average	186.28	235.04	26.18%	217.30	-7.55%

⁽¹⁾ Moody's Bond Survey, 3/12/90

⁽²⁾ Blue Chip Financial Forecasts, March 1, 1990

^{(3) %} change from prior years

⁽⁴⁾ Value Line, 3/2/90

⁽⁵⁾ Not Annualized

^{&#}x27;6) WSJ, 3/16/90

MEMORANDUM

February 23, 1990

TO:

WALTER D'HAESELEER, DIRECTOR OF COMMUNICATIONS JOE JENKINS, DIRECTOR OF ELECTRIC AND GAS CHUCK HILL, DIRECTOR OF WATER AND SEWER

FROM:

TIM DEVLIN, DIRECTOR OF AUDITING AND FINANCIAL

ANALYSIS

RE:

QUARTERLY REPORT ON EQUITY COST RATES

Attached are the results of our analysis regarding utility common equity costs for the fourth quarter of 1989 and other information on the cost of equity. Although this report is later than usual, the estimates of the cost of equity represent the information available as of November of 1989. We will provide an updated report for the first quarter of 1990 in the near future. Page 7 of the report is a brief summary of interest rates, inflation rates, and related forecasts. Some additional items that may be of further interest are:

Leading economic indicators declined 0.4% in October, while manufacturing contracted in November for the seventh month in a row. Many economists say the slowdown is confined to manufacturing, and is not indicative of the strength of the overall economy. However, many analysts believe additional signs of weakness are likely to prompt the Fed to lower short-term interest rates.

Fitch Investor Services lowered its rating on Florida Power and Light's First Mortgage Bonds and Commercial Paper to "A+" from "AA-". Fitch stated the reduced ratings reflect weakened interest coverage and the added expense of addressing NRC concerns at the Turkey Point nuclear station, and growing construction requirements. This action is consistent with that taken by Standard & Poor's

during May of this year. At that time, S & P also lowered FPL's rating to "A+" from "AA-".

11.

On page 6 is a chart that shows the average spread between the common equity returns authorized by this Commission during the 1980s and concurrent bond yields. Caution should be exercised when viewing this chart because of the inherent circularity and inappropriateness of relying upon past authorized returns to estimate current market requirements. The cost of equity is a function of investor expectations and risk and not a function of previously authorized returns.

In 1989, as shown on page 7, the substantial increase in the Dow Jones Utility Average has outpaced the substantial increases in both the Dow Jones Industrial Average and the S&P 500.

CC: Chairman Wilson
Commissioner Gunter
Commissioner Herndon
Commissioner Beard
Commissioner Easley
Dave Swafford
Bill Talbott
John Slemkewicz
Dale Mailhot
Joe McCormick
Marshall Willis
Bill Lowe
Bob Freeman
Economic Regulation Standards Control

RATE CASE DECISIONS®

	BOND			ALLOWED
UTILITY	RATTNO	COMMISSION	DATE	ROE
ELECTRIC				-
Central Hudson Gas & Elec	4	New York	68/81/9	13.00%
Duke Fower	Α.	North Carolina	68/01/K	13.20%
El Paso Electric	+	Texas	4/27/89	12.40%
Georgia Power	00 00 00 00 00	Georgia	9/27/89	12.25%
Gulf States Utilities	-40	Louisiana	3/1/89	13.00%
Illisois Power	00 00 00	Illisois	68/DE/K	14.00%
lows P & L	>	Swo]	88759	13.20%
Iowa Public Service	^	Iowa	2/20/89	12.40%
Long Island Ling	38+	New York	4/13/89	14.20%
Louisians P & L	1888	Louisiana	7/6/89	12.76%
Medieon G & E	AA	Wisconsin	7/14/89	13.50%
Mostana Power	200 + 200 +	Montans	8/15/89	12.50%
Now York State E & G	888	New York	3/8/89	13.00%
South Carolina Elec & Gas	A+	South Carolina	6/27/89	13.25%
Tucson Electric Power	. 10 GB	Arizona	10/18/89	12.50%
Western Massachusetts El.	888+	Massachusetts	7/24/89	13.00%
Electric Generic		FERC	2/5/90	11.75%
SVD				
Gulf States Utility Co.	100	Louisiana	S8/0E/S	12.00%
Virginia Net'l Gas Inc	. NR	Virginia		13.25%
TELECOMMUNICATIONS				
GTE Northwest	>	Idaho	5/1/89	12.00%
South Central Bell	24	Louisiana	\$/30/89	12.75%

reveals the average rating of the utilities listed is "BBB" with some speculative grade recommendations to testimony concurrently filed in other jurisdictions. anges in capital markets, a more relevant comparison would be to compare staff's current meseaded returns and those allowed by other states may be inappropriate. Given recent ies contained in the chart. In eddition, a comparison between the staff's currently

Public Utilities Fortnightly 11/9/89 NRRI Quarterly Bulletin, Sept. 1989 Salomon Brothers, 11/8/89

⁶⁰ Date of order or decision.

COST OF EQUITY ANALYSIS Fourth Quarter 15-3

		EX ANTE:	HISTORICAL **	HISTORUCAL **
	DISCOUNTED.	RISK	RISK PREMIUM	BLSK PREMIUM
	CASH FLOW	PREMIUM	10 YEAR AVG	20 YEAR AVG
ELECTRIC UTILITIES				
FLORIDA POWER (AAJ/A+)	11.2	11.2	13.2	10.4
FPL (Aa3/A+)	11.2	11.2	13.2	10.4
FPUC	8.11	8.1	13.2	10.4
GULF POWER (A/A)	11.3	11.4	13.2	10.4
TAMPA ELECTRIC (Asi/AA)	0.11	1.1	13.2	10.4
TELEPHONE UTILITIES				
CENTEL (A3/A+)	11.7	12.0	13.2	10.4
GENTEL (Aa2/AA-)	11.4	11.7	13.2	10.4
SOUTHERN BELL (Ans/AAA)	11.0	11.4	13.2	10.4
UNITED (AA2/A)	11.5	11.00	13.2	10.4
OTHER TELEPHONE UTILITIES	12.1	12.4	13.2	10.4
GAS UTILITIES	11.7	12.4	13.2	10.4
WATER AND SEWER The cost of eq	uity obtained using	the current level	The cost of equity obtained using the current leverage formula is 11.76% at 100% equity	% at 100% equity
and 13.95% at	and 13.95% at an equity ratio of 40% or lower.	10% or lower.		
The current les	verage formula is:	COE = 10.30	The current leverage formula is: COE = 10.30 + (1.46/Equity Ratio)	٦

 The cost of equity cannot be measured precisely. Analysts use various methods & models to estimate its cost. Over the part 3 years we approximately a one percentage point change (same direction) in our estimated cost of equity (holding all other inputs constant). the cost of equity. A 100 basis point change in long-term treasury yields results in a 100 basis point change (same direction) in our can affect his result. The risk premium & DCF model are seasitive to various input assumptions. A very basic relationship in our risk different analysts use the same models, they can arrive at different estimates because of their input assumptions. Thus when comparing have used a non-constant growth discounted cash flow model & a risk premium analysis to estimate the cost of equity. We try to be estimated cost of equity. Similarly, in our DCF analysis a one percentage point change in the dividend growth rate results in premium analysis, for example, is the perfect positive correlation between the long-term treasury yield forecast and our estimate of cost of equity estimates it is important to understand the rationals underlying the analyst's assumptions and how changing a variable equity from period to period reflect changing economic conditions & investor expectations—not a different method. Even when consistent & objective in our application of the models. A consistent & objective approach ensures that differences in the cost of

Distinguishes among companies on the basis of bond ratings. In a rate proceeding staff would perform a more thorough analysis of the company and its characteristics relative to the index of companies used to determine the required rate of return.

^{**} Based on the data published in the Stocks, Bonds, Bills, and Inflation 1988 Yearbook, published by Ibbotson Associates. The historical risk premium reflects the average annual difference between the holding period returns of the S&P 500 stock index and the holding period returns of a 20 year Government Bond. The result shows above reflects a market return. (see page 8)

^{***}For regulatory purposes, the Commission will establish a midpoint cost of equity with a range of 100 basis points above and below the

SUMMARY OF RETURN ON EQUITY ORDERS

ELECTRICS	ORDER	ORDER SUMMARY
FLORIDA POWER	18627	Rates set at 12.6% with a range of 12.6% to 13.6%.
FPL FPL	TBA	Sets range of 12.3% to 13.3% with a midpt. of 12.8%.
FPUC (Marianna)	21532	Retes set at 13.35%, with a range of 12.35% to 14.35%.
FPUC (Fernandina)	22224	Rates set at 12.85%, with a range of 11.85% to 13.85%.
GULF POWER	20451	Rate case in progress. In 1989, 13.75% was midpt for overall return, AFUDC, & surveillance.
TAMPA ELECTRIC	20451	In 1989, 13.6% was midpt for overall return, AFUDC, & surveillance. Absent any decision for
I AMPA ELECTRIC	20431	1990, the midpt, reverts back to 14.5% for all purposes.
		1990, the marks revers once to 14.3% for an perpension
TELEPHONES ·		
ALLTEL	20517	Caps 1988-90 earnings at 14.8%. Sets range of 12.8% to 14.8%, midpt of 13.8%, for all purposes.
CENTEL	21057	Rate case in progress. Centel's earnings capped at 13.75% for 1989.
FLORALA	22261	Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes.
GENTEL	22352	Sets range of i1.3% to 13.3% with a midpt. of 12.3% for all future purposes.
GULF	22297	Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes.
INDIANTOWN	21474	Caps carnings at 14.5% for 1988 & 1989.
NORTHEAST	22273	Sets range of 11.4% to 13.4% with a midpt. of 12.9% for all future purposes.
QUINCY	22367	Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes.
ST. JOE	22284	Sets range of 11.9% to 13.9% with a midpt. of 12.9% for all future purposes.
SOUTHERN BELL	20162	Earnings sharing plan. Sets rates at 13.2%, sharing starts at 14%, ceiling after sharing > 16%
SOUTHLAND	18957	Sets range of 12.8% to 14.8% for all purposes.
UNITED	22377	Rate case in progress. Range of 12.3% to 13.3% with a midpt, of 12.8% set for interior only
OMILLO	20011	the time is progress the great to the terms of the terms
GAS		
CENTRAL FLORIDA	18716	Rate case in progress. Last authorized set at 13.9% with a range of 12.9% to 14.9%.
CITY GAS	20636	Sets 13.7% as midgt for tax rule purposes for 1989.
FLORIDA PUBLIC	20258	Sets 13.5% as midpt for tax rule, AFUDC, and surveillance purposes
INDIANTOWN		
MILLER	20636	Sets 13.7% as midpt for tax rule purposes for 1989.
PEOPLES	20636	MFRs being filed. Sets 13.7% as midpt for tax rule purposes for 1989.
PLANT CITY	20636	Rate case in progress. In 1989, 13.7% was midpoint for tax rule purposes.
ST. JOE	19793	Sets range of 12.7% to 14.7% with midpt of 13.7% for calculating overearnings & interim.
PALM BCH COUNTY	20636	Sets 13.7% as midpt for tax rule purposes for 1989.
SOUTH FLORIDA	17933	Rates set at 13.23% with a range of 12.23% to 14.23%.
SOUTHERN	20636	Sets 13.7% as midpt for tax rule purposes for 1989.
WEST FLORIDA	21054	Rates set at 13.5% with a range of 12.5% to 14.5%.
WATER & SEWER	19718	Established the current leverage formula: COE = 10.3 + (1.46/Equity Ratio). The cost of
		equity using the formula is 11.76% at 100% equity & 13.95% at 40% equity or lower.

^{*} This schedule contains a very brief summary of the order. Copies of the orders can be obtained from the Clerk's office.

AVERAGE AUTHORIZED ROE OVER BOND YIELD®

Electrics

UTILITY	DOCKET	DATE	AUTH	BOND	DIFFER	AVG/BONDS	BOND
FPL	890319	10-Jan-90	12.80%	9,445	3.36%	Dec-89	A+
3.570			13.60% **	10.08%	3.52%	Apr-89	A+
FPL	890319	28-Apr-89					
Tampa El	890325	27-Apr-89	. 13.60% **	10.02%	3.58%	Apr-89	AA
Gulf	880360	31-Mar-89	13.75% **	10.23%	3.52%	Mar-89	A
Gulf	380360	19-Apr-88	13.75% **	10.54%	3.21%	Apr-88	A
FPL	880355	19-Apr-88	13.60% **	10.39%	3.21%	Apr-88	AA-
Tampa El	880356	19-Apr-88	13.60% **	10.29%	3.31%	Apr-88	AA
FPC	870220	04-Jan-88	12.60% **	10.66%	1.94%	Jan-88	A+
FPC	861096	19-Nov-86	12.50%	9.18%	3.32%	Nov-86	A+
Tampa El	850050	13-Dec-85	14.50%	10.57%	3.93%	Dec-85	AA
Gulf	840086	25-Jan-85	15.60%	12.89%	2.71%	Jan-85	A+
FPL	830465	16-Jan-85	15.60%	12.89%	2.71%	Jan-85	A+
FPL	830465	28-Dec-84	15.60%	13.01%	2.59%	Dec-84	A+
FPC	830470	12-Oct-84	15.50%	13.70%	1.80%	Oct-84	A+
Tampa El	830012	07-Nov-83	15.50%	12.97%	2.53%	Nov-83	AA
FPC	820100	17-Feb-83	15.85%	14.16%	1.69%	Feb-83	A+
Gulf	820150	11-Jan-83	15.85%	14.14%	1.71%	Jan-83	A+
FPL	820097	22-Dec-82	15.85%	14.33%	1.52%	Dec-82	A+
Tempe El	820007	10-Nov-82	15.75%	12.92%	2.83%	Nov-82	AA
Gulf	810136	07-Jul-82	15.85%	16.32%	-0.47%	Jul-82	A+
FPL	810002	21-Dec-81	15.85%	16.19%	-0.34%	Dec-81	A+
FPC	800119	27-Jul-81	15.50%	16.11%	-0.61%	Jul-81	A+
Gulf	800001	05-Mar-81	14.75%	15.04%	-0.29%	Mar-81	A+
Tampa El	800011	17-Oct-80	14.50%	13.33%	1.17%	Oct-80	AA

AVERAGE		2.19%
AVERAGE EXCLUDING	ROES SET OUTSIDE OF A HEARING	1.77%

This chart shows the difference between the four major electric utilities authorized
 ROE and the cost of similarly rated utility debt at the time of the Commission's decision.

^{**} Based on decisions without a full hearing.

CURRENT AND FORECASTED INTEREST AND INFLATION RATES

INTEREST RATES

				AVERAGE	FIRST	SECOND	PORECAST • THIRD	FOURTH
	1986(1)	1987(1)	1988(1) GES *****	1888(I) MOA	1999(I)	QUARTER 1990(2)	QUARTER 1990(2)	QUARTER 1990(2)
Ann Utility	8.92	9.52	10.05	8.92				
As Utility	9.30	9.77	10.26	9.25				
A Utility	9.58	10.10	10.49	9.51	9.1	9.1	9.2	9.3
Bea Utility	10.00	10.53	11.00	9.64				
Prime Rate	8.28	8.10	9.44	10.50	9.8	9.6	9.6	9.7
Commercial								
Paper (30 day)	6.66	6.70	7.72	8.47	8.0	7.8	7.8	7.9
Long Term								
Treesury Bond	8.19	8,70	9,04	8.00	7.7	7.7	7.8	7.9

INFLATION RATES (3)

	***** AN	NUAL AVERA	GES *****	LATEST ACTUAL (2)	FIRST QUARTER	SECOND QUARTER	FORECAST • THIRD QUARTER	FOURTH QUARTER
	1986(4)	1987(4)	1988(4)	11/30/89	1990(2)	1990(2)	1990(2)	1990(2)
Consumer .								
Price Index	1.9	3.7	4.1	2.6	4.2	4.2	4.2	4.3
GNP Deflator	2.7	3.3	3,4	3.2	4.1	4.0	4.0	4.0

STOCK MARKET PERFORMANCE

	12/31/87	12/31/88	PERCENT CHANGE	12/18/89	PERCENT CHANGE(5)
S & P 500	247.08	277.72	12.40%	343.69	23.75%
Dow Jones Industrial Average	1938.83	2168.57	11.80%	2697.5	24.39%
Dow Jones Utility Average	175.08	186.28	6.4%	233.65	25.43%

⁽¹⁾ Moody's Bond Survey, 12/11/89

⁽²⁾ Blue Chip Financial Forecasts, December 1, 1989

^{(3) %} change from prior years

⁽⁴⁾ Value Line, 8/11/89

⁽⁵⁾ Not Annualized

⁽⁶⁾ WSJ, 12/19/89

HISTORICAL RISK PREMIUM STUDY

YEAR	S&P 500*	LT TREAS*	DEFFERENCE		
1968	11.1%	-0.3%	11.4%		
1969	-8.5%	-5.1%	-3.4%		
1970	4.0%	12.1%	-8.1%		
1971	14.3%	13.2%	1.1%		
1972	19.0%	\$.7%	13.3%		
1973	-14.7%	-1.1%	-13.6%		
1974	-26.5%	4.4%	-30.9%		
1975	37.2%	9.2%	28.0%		
1976	23.8%	16.8%	7.0%		
1977	-7.2%	-0.7%	-6.5%		
1978	6.6%	-1.2%	7.8%		
1979	18.4%	-1.2%	19.6%		
1980	32.4%	-4.0%	36.4%		
1981	4.9%	1.8%	-6.7%		
1982	21.4%	40.3%	-18.9%		
1983	22.5%	0.7%	21.8%		
1984	6.3%	15.4%	-9.1%		
1985	32.2%	31.0%	1.2%		
1986	18.5%	24.4%	-5.9%		
1987	5.2%	-2.7%	7.9%		
20 YEAR AVERAGE	10.6%	7.9%	2.6%		
10 YEAR AVERAGE	15.9%	10.5%	5.4%		

STOCKS, BONDS, BILLS, AND INFLATION 1988 YEARBOOK EXHIBITS C-1 AND C-4

The returns for the S&P 500 and long-term treasuries are one year holding period returns. For example, an investor who bought the S&P 500 index on Jeauary 1, 1987 and sold it on December 31, 1987 would have realized a total return of 5.2%.

MEMORANDUM

February 14, 1989

TO:

WALTER D'HAESELEER, DIRECTOR OF COMMUNICATIONS JOE JENKINS, DIRECTOR OF ELECTRIC AND GAS CHUCK HILL, DIRECTOR OF WATER AND SEWER

FROM:

MARK CICCHETTI, CHIEF, BUREAU OF FINANCE HC17

RE:

QUARTERLY REPORT ON EQUITY COST RATES

Attached please find the results of our latest analysis regarding utility common equity costs. These figures represent <u>Staff's estimate</u> of the current cost of common equity for the companies indicated. Page 5 of the report is a brief summary of recent and current interest rates, inflation rates, and related forecasts. Some additional items that may be of further interest are:

- The Fed is expected to increase short-term interest rates in response to signs of accelerating inflation. Recent Fed tightening has prompted the major banks to raise their prime lending rate to 11% from 10.5%.
- Escalating energy and food prices caused the Producer Price Index (the measure of prices paid by wholesalers) to increase 1% in January. If inflation continues at that pace for the entire year, wholesale prices will increase 12.7%.
 - The securities ratings of Centel Corporation and its related entities were downgraded in September from AA to BBB+ by Standard & Poor's. The downgrades were related to Centel's announced intention of funding its \$797 million acquisition of cellular and paging businesses with new debt and some asset sales. A recent conversation with an S&P analyst revealed the S&P rating has been updated to A+ within the last several days. Moody's A3 rating for Centel's telephone operating companies remained constant over this period.

- . The beliwether 30 year treasury bond is currently trading at a 9.10% yield to maturity. Blue Chip Financial Forecasts predicts a rate of 9.10% for the next four quarters as compared to a forecast of 9.225% last quarter.
- . Since the last quarterly report, slightly higher average utility stock prices caused staff's DCF estimate of the current cost of equity to inch downward. Lower expected long-term interest rates also resulted in a slightly lower risk premium estimate of equity cost rates.

7662F/1s Attachments

cc: Chairman Wilson
Commissioner Gunter
Commissioner Herndon
Commissioner Beard
Commissioner Easley
Dave Swafford
Bill Talbott
John Slemkewicz
Dale Mailhot
Joe McCormick
Marshall Willis
Bill Lowe
Bob Freeman
Economic Regulation Standards Control

		TIMATE OF THE REQUIRED ROF (1)	RATE C	ED TO TEMAKING OF RETURN (2)	AUTHOR 12ED	PER	
ELECTRICS	DCF	RISK PR	DCF	RISK PR	ROE RANGE	STIPULATION	ORDER
				NION PR	NOE KANGE	STIPOCATION	NUMBER (4)
FLORIDA POWER (Aa3/A+)	12.3	13.4	11.6	12.6	12.60 - 13.60		
FPL (Aa3/AA-)	12.2	13.3	11.5	12.5	14.60 - 16.60	13.6	20451
FPUC (Marianna)	12.9	14.0	12.2	13.2	12.75 - 13.75	13.0	20451
FPUC (Fernandina Bch)	12.9	14.0	12.2	13.2	12.73	13.5	20258
GULF POWER (A/A)	12.4	13.5	11.7	12.7	14.60 - 16.60	13.75	20258
TAMPA ELECTRIC (AB1/AA)	12.1	13.2	11.4	12.5	13.50 - 15.50	13.6	20451
TELEPHONES							
ALLTELL	13.1	14.5	12.4	13.6	13.60 - 15.60	14.80	20517
CENTEL (A3/A+)	12.6	13.9	11.9	13.1	11.75 - 13.75	13.75	17783
FLORALA	13.1	14.5	12.4	13.6	14.00 - 16.00	14.8	
GENTEL (ABZ/AA-)	12.3	13.7	11.7	12.9	14.50 - 16.50	14.0	19165
GULF	13.1	14.5	12.4	13.6	12.80 - 14.80	14.8	19169
INDIANTOWN	13.1	14.5	12.4	13.6	12.00 - 12.75	14.0	19109
NORTHEAST	13.1	14.5	12.4	13.6	13.50 - 16.50	15.3	10145
QUINCY	13.1	14.5	12.4	13.6	12.80 - 14.80	14.8	19165
ST. JOE	13.1	14.5	12.4	13.6	14.00 - 16.00	14.8	18831
SOUTHERN BELL (Ass/AAA)	12.0	13.4	11.4	12.6	11.50 - 16.00 (3		19165
SOUTHLAND	13.1	14.5	12.4	13.6	12.80 - 14.80	,	18957
UNITED (As2/AA)	12.3	13.7	11.7	12.9	14.75 - 16.75	14.5	19726
GAS							
CENTRAL FLORIDA	12.6	14.5	11.9	13.6	12.90 - 14.90		
CITY GAS	12.6	14.5	11.9	13.6	14.75 - 16.75	13.7	20636
FLORIDA PUBLIC	12.6	14.5	11.9	13.6	13.50 - 15.50	13.5	20258
GAINESVILLE	12.6	14.5	11.9	13.6	12.30 - 14.30		20134
INDIANTOWN	12.6	14.5	11.9	13.6			
MILLER	12.6	14.5	11.9	13.6	14.75 - 16.75	13.7	20636
PEOPLES	12.6	14.5	11.9	13.6	13.25 - 15.25	13.7	20636
PLANT CITY	12.6	14.5	11.9	13.6	15.70 - 17.70	13.7	20636
ST. JOE	12.6	14.5	11.9	13.6	12.70 - 14.70	13.7	19793
PALM BEACH COUNTY	12.6	14.5	11.9	13.6	15.25 - 17.25	13.7	20636
SOUTH FLORIDA	12.6	14.5	11.9	13.6	12.23 - 14.23		
SOUTHERN	12.6	16.5	11.9	13.6	14.75 - 16.75	13.7	20636
WEST FLORIDA	12.6	14.5	11.9	13.6	12.50 - 14.50		PENDING

WATER AND SEWER

The cost of equity obtained using the current leverage formula is 12.13% at 100% equity and 14.35% at an equity ratio of 40% or lower.

The current leverage formula is: COE = 10.65 + (1.48/Equity Ratio)

FOOTNOTES

⁽¹⁾ Staff relies on a quarterly DCF model and a risk premium method to estimate the investor's required return on equity.

⁽²⁾ Staff bebelieves the correct approach is to first estimate the investor's required return (the effective rate) and then adjust thehe effective rate to the nominal rate so investors only earn the effective rate.

⁽³⁾ The range established in Docket No. 880069-TL is explained on the next page.

⁽⁴⁾ The orders are described on the next page.

QUARTERLY REPORT ON EQUITY COST RATES

DESCRIPTION OF ORDERS

19165

19169

18831

18957

19726

19703

20636

ORDER NO. DESCRIPTION

Sets 13.6% (FPL & TECO) and 13.75% (Gulf Power) as the equity midpoint in the calculation of an overall rate of return, for the AFUDC rate, and

for surveillance purposes for 1989.

20258 Sets 13.5% as the midpoint for the tax rule, earnings surveil!=nce and AFUDC for Florida Public Utilities gas division & Fernandina Bch electric division.

20517 Establishes an authorized ROE range for Alltel of 12.8% to 14.8% with a m:dpoint of 13.8% for all purposes.

17783 Establishes Centel's ROE within a range of 11.75% to 13.75%.

Provides that in computing refunds for 1987 and 1988 the ROEs to be employed are 13.25% and 13.75%, respectively.

Establishes a range of 13.5% to 16.5% with a midpoint of 15% for Northeast Florida Telephone beginning in 1988 for all future purposes. Provides for the recording of additional depreciation for earnings greater than 15.3% for 1988 and 1989.

Sets an ROE ceiling of 14.8% for St. Joe for 1988 and 1989.

Establishes a range of 14% to 16% with a midpoint of 15% for Florala for all future purposes. Provides for the recording of additional depreciation for earnings greater than 14.8% for 1988 and 1989.

Sets ROE range of 12.8% to 14.8% for Gulf Telephone. Provides for a refund of 1988 earnings in excess of 14.8%.

Sets ROE range of 12.8% to 14.8% for Guincy Telephone. Provides for a refund of 1988 earnings in excess of 14.8%.

Sets authorized ROE at 12.8% to 14.8% for all purposes. Caps earnings at 14.8%.

Sets ROE range of 12.5% to 14.5% with a midpoint of 13.5% for calendar years 1988 & 1989 for United Telephone of Florida to be used for all purposes.

Stipulation, St. Joe Natural Gas. Supplants the Utility's last authorized ROE with a range of 12.7% to 14.7% with a midpoint of 13.7% for purposes of calculating future overearnings and for setting interim rates.

Sets 13.7% as the midpoint in 1989 for tax rule purposes.

20134 Rate case, Gainesville Gas. Set ROE range of 12.3% to 14.3% with a midpoint of 13.3%

PENDING Rate case, West Florida Nat'l Gas. Set ROE range of 12.5% to 14.5% with a midpoint of 13.5%.

In Docket No. 880069-TL, the Commission set the following ROEs for Southern Bell:

11.5% - Authorized Floor 13.2% - Rate Setting Point

14.0% - Point at which sharing starts. (60% to ratepayers - 40% to Southern Bell)

16.0% - Authorized Ceiling after Sharing

INTEREST AND INFLATION RATES

INTEREST RATES

					********	**** BLUE CHIE	FORECAST	*************
				AVERAGE	SECOND	THIRD	FOURTH	FIRST
	*******	ANNUAL AVERAGES	*******	JANUARY	QUARTER	QUARTER	QUARTER	QUARTER
	1985(1)	1986(1)	1987(1)	1989(1)	1989(2)	1989(2)	1989(2)	1990(2)
Aaa Utility	11.58	8.92	9.52	9.72				
As Utility	12.14	9.33	9.77	9.89				
A Utility	12.47	9.58	10.1	10.08	10.5	10.4	10.3	10.1
Saa Utility	12.96	10	10.53	10.38				
Prime Rate	8.9	8.28	8.1	10.5	10.8	10.7	10.3	10
Commercial								
Paper Rate	8.01	6.66	6.7	9	9.2	9	8.6	8.3
Long Term								
Treasury Bond	10.89	8.19	8.7	8.91	9.2	9.2	9	8.9

INFLATION RATES (3)

					*******	**** BLUE CHIP	FORECAST	**************
				LATEST	SECOND	THIRD	FOURTH	FIRST
	****	ANKUAL AVERAGES	*******	ACTUAL (2)	QUARTER	QUARTER	QUARTER	QUARTER
	1985(1)	1986(1)	1987(1)	1/27/89	1989(2)	1989(2)	1989(2)	1990(2)
Consumer								
Price Index	3.6	1.9	3.7	4.8	5.0	5.0	4.9	4.9
						20120		
GMP Deflator	3.2	2.6	3.0	4.7	4.5	4.6	4.5	4.6

STOCK INDICES

	12/31/87	12/31/88	% CHANGE	2/7/89

S & P 500	247.08	277.72	12.40%	299.63
Dow Jones Industrial Average	1938.83	2168.57	11.80%	2347.14
Dow Jones Utility Average	175.08	186.28	6.4%	190.85

⁽¹⁾ Moody's Bond Survey

⁽²⁾ Blue Chip Financial Forecasts, Feb. 1, 1989

^{(3) %} change from prior years

Lele

MEMORANDUM

May 9, 1989

TO:

WALTER D'HAESELEER, DIRECTOR OF COMMUNICATIONS

JOE JENKINS, DIRECTOR OF ELECTRIC AND GAS CHUCK HILL, DIRECTOR OF WATER AND SEWER

FROM:

MARK CICCHETTI, CHIEF, BUREAU OF FINANCE THE STATE

RE:

QUARTERLY REPORT ON EQUITY COST RATES

Attached please find the results of our latest analysis regarding utility common equity costs. These figures represent Staff's estimate of the current cost of common equity for the companies indicated. Page 5 of the report is a brief summary of recent and current interest rates, inflation rates, and related forecasts. Some additional items that may be of further interest are:

- In the latest month inflation grew at a more reasonable pace, with both wholesale and consumer prices advancing at a more moderate clip than earlier in the year. However, pricing pressures may intensify in the months ahead as a result of the Alaska oil spill, the effects of last summer's drought, and the potential for higher wage costs growing out of contract negotiations this year in the steel and communications industries.
- Interest rates fell across the yield curve during the past several weeks as traders reacted favorably to a steady stream of economic data signaling a slowing of business activity. Price increases have been greatest in the short end of the yield curve where rates have fallen 50 to 60 basis points.

- Standard & Poor's downgraded Florida Power & Light's senior secured debt rating to A+ from AA- and senior debt and preferred stock to A from A+. Standard & Poor's said that it recognizes that the utility operates in an extremely healthly service territory and benefits from supportive rate regulation. Also, overall nuclear operating performance has been satisfactory despite recent difficulties with the Turkey Point Plant. Standard & Poor's added that the utility's qualitative strengths don't justify maintenance of the former ratings given recent and anticipated financial performance.
- Since the last quarterly report, higher average telephone stock prices drove Staff's estimate of the DCF cost of equity for the telephone index down, while lower average stock prices resulted in a higher staff estimate of the cost of equity for the electric and gas indices.

I have attached a couple of items that you might find interesting. First, the Selected Interest Rates published by <u>Value Line</u> shows the change that has occurred in widely followed interest rates over the past year. Second, the indices and DCF analyses used by staff to estimate the DCF cost of equity are also attached.

7662F/1s Attachments

cc: Chairman Wilson
Commissioner Gunter
Commissioner Herndon
Commissioner Beard
Commissioner Easley
Dave Swafford
Bill Talbott
John Slemkewicz
Dale Mailhot
Joe McCormick
Marshall Willis
Bill Lowe
Bob Freeman
Economic Regulation Standards Control

	INVESTOR	TIMATE OF THE REQUIRED ROE (1)	THE RATE O	TED TO ATEMAKING OF RETURN (2)			
ELECTRICS	BCF			**********	AUTHOR! ZED	PER	ORDER
*******	961	RISK PR	DCF	RISK PR	ROE RANGE	ORDER	MUPBER (4)
FLORIDA POMER (Aa3/A+)		49.9	****		**********	******	*****
FPL (Aa3/A+)	12.4	13.3	11.8	12.5	12.60 - 13.60		
FPUC (Marianna)	12.4	13.3	11.8	12.5	14.60 - 16.60	13.6	20451
FPUC (Fernandina Bch)	13.0	13.8	12.3	13.0	12.75 - 13.75		
GULF POWER (A/A)	13.0	13.8	12.3	13.0		13.5	20258
	12.5	13.4	11.9	12.6	14.60 - 16.60	13.75	20451
TAMPA ELECTRIC (As1/AA)	12.2	13.0	11.6	12.3	13.50 - 15.50	13.6	20451
TELEPHONES							

ALLTELL	12.8	14.3	12.1	13.4	12.80 - 14.80	14.80	20712
CENTEL (A3/A+)	12.6	13.7	11.9	12.9	11.75 - 13.75	13.75	20517
FLORALA	12.8	14.3	12.1	13.4	14.00 - 16.00		17783
GENTEL (A02/AA-)	12.0	13.5	11.4	12.7	14.50 - 16.50	14.8	19165
GULF	12.8	14.3	12.1	13.4	12.80 - 16.80	14.8	
I ND I ANTOWN	12.8	14.3	12.1	13.4	12.00 - 12.75	14.8	19169
MORTHEAST	12.8	14.3	12.1	13.4	13.50 - 16.50		
QUINCY	12.8	14.3	12.1	13.4	12.30 - 14.30	15.3	19165
ST. JOE	12.8	14.3	12.1	13.4	14.00 - 16.00	14.3	20143
SOUTHERN BELL (Ass/AAA)	11.7	13.2	11.1	12.5		14.8	19165
SOUTHLAND	12.8	14.3	12.1	13.4	11.50 - 16.00 (3)	
UNITED (As2/AA)	12.0	13.5	11.4	12.8	12.80 - 14.80 12.50 - 14.50	14.5	18957 19726
GAS						930 3 - 3	
CENTRAL FLORIDA	13.1	14.3	12.4	13.4	12.90 - 14.90		
CITY GAS	13.1	14.3	12.4	13.4	14.75 - 16.75	13.7	
FLORIDA PUBLIC	13.1	14.3	12.4	13.4	13.50 - 15.50	13.5	20636
GAINESVILLE	13.1	14.3	12.4	13.4	12.30 - 14.30	13.3	20258
INDIANTON	13.1	14.3	12.4	13.4	16.30 - 14.30		20134
MILLER	13.1	14.3	12.4	13.4	4/ == 4/ ==		
PEOPLES	13.1	14.3	12.4	13.4	14.75 - 16.75	13.7	20636
PLANT CITY	13.1	14.3	12.4	13.4	13.25 - 15.25	13.7	20636
ST. JOE	13.1	14.3	12.4	13.4	15.70 - 17.70	13.7	20636
PALM BEACH COLMTY	13.1	14.3	12.4		12.70 - 14.70	13.7	19793 👵
SOUTH FLORIDA	13.1	14.3	12.6	13.4	15.25 - 17.25	13.7	20636
SOUTHERN	13.1	14.3	12.4	13.4	12.23 - 14.23		
WEST FLORIDA	13.1	14.3	12.4	13.4 13.4	14.75 - 16.75 12.50 - 14.50	13.7	20636 21054

WATER AND SEWER

The cost of equity obtained using the current leverage formula is 12.13% at 100% equity and 14.35% at an equity ratio of 40% or lower. The current leverage formula is: COE = 10.65 + (1.48/Equity Ratio)

POOTHOTES

⁽¹⁾ Staff relies on a quarterly SCF model and a risk premium method to estimate the investor's required return on equity.

(2) Staff believes the correct approach is to first estimate the investor's required return (the effective rate)

and then adjust the effective rate to the nominal rate so investors only earn the effective rate.

(3) The range established in Docket No. 830069-TL is explained on the next page.

⁽⁴⁾ The orders are described on the next page.

GUARTERLY REPORT ON EQUITY COST RATES

DESCRIPTION OF ORDERS

ORDER NO. DESCRIPTION 20451 Sets 13.6% (FPL & TECO) and 13.75% (Gulf Power) as the equity midpoint in the calculation of an overall rate of return, for the AFUDC rate, and for surveillance purposes for 1989. 20258 Sets 13.5% as the midpoint for the tax rule, earnings surveillance and AFUDC for Florida Public Utilities gas division & Fernandina Sch electric division. 20517 Establishes an authorized ROE range for Alltel of 12.8% to 14.8% with a midpoint of 13.8% for all purposes. 17783 Establishes Centel's ROE within a range of 11,75% to 13,75%. Provides that in computing refunds for 1987 and 1988 the ROEs to be employed are 13.25% and 13.75%, respectively. 19165 Establishes a range of 13.5% to 16.5% with a midpoint of 15% for Northeast Florida Telephone beginning in 1988 for all future purposes. Provides for the recording of additional depreciation for earnings greater than 15.3% for 1988 and 1989. Sets an ROE ceiling of 14.8% for St. Joe for 1988 and 1989. Establishes a range of 14% to 16% with a midpoint of 15% for Florata for all future purposes. Provides for the recording of additional depreciation for earnings greater than 14.8% for 1988 and 1989. 19169 Sets ROE range of 12.8% to 14.8% for Gulf Telephone. Provides for a refund of 1988 earnings in excess of 14.8%. 18831 Sets ROE range of 12.8% to 14.8% for Quincy Telephone. Provides for a refund of 1988 earnings in excess of 14.8%. 18957 Sets authorized ROE at 12.8% to 14.8% for all purposes. Caps earnings at 14.8%. 19726 Sets ROE range of 12.5% to 14.5% with a midpoint of 13.5% for calendar years 1988 & 1989 for United Telephone of Florida to be used for all purposes. 19793 Stipulation, St. Joe Natural Gas. Supplants the Utility's last authorized ROE with a range of 12.7% to 14.7% with a midpoint of 13.7% for purposes of calculating future overearnings and for setting interim rates. 20434 Sets 13.7% as the midpoint in 1989 for tax rule purposes. 20134 Rate case, Gainesville Gas. Set ROE range of 12.3% to 14.3% with a midpoint of 13.3% 21054 Rate case, West Florida Nat'l Gas. Set ROE range of 12.5% to 14.5% with a midpoint of 13.5%. In Docket No. 880069-TL, the Commission set the following ROEs for Southern Sell: 11.5% - Authorized Floor 13.2% - Rate Setting Point

16.0% - Point at which sharing starts. (60% to ratepayers - 40% to Southern Bell)

16.0% - Authorized Ceiling after Sharing

INTEREST AND INFLATION RATES *******************

INTEREST RATES

					********	BLUE CHIP	FORECAST	**********
	1986(1)	AMMUAL AVERAGES 1987(1)	1988(1)	AVERAGE MARCH 1989(1)	THIRD GUARTER 1989(2)	FOURTH GUARTER 1989(2)	FIRST QUARTER 1990(2)	SECOND QUARTER 1990(2)
	******	******	******	******	******			******
Ass Utility	8.92	9.52	10.05	9.87				
As Utility	9.30	9.77	10.26	10.05				
A Utility	9.58	10.10	10.49	10.23	10.4	10.2	10.1	9.0
See Utility	10.00	10.53	11.00	10.50				
Prime Rate	8.28	8.10	9.44	11.50	11.5	11.2	10.7	10.4
Commercial								
Paper Rate	6.66	6.70	7.72	9.95	9.8	9.4	8.9	8.6
Long Term								
Treasury Bond	8.19	8.70	9.04	9.31	9.2	9.1	8.9	8.8

INFLATION RATES (3)

					*******	BLUE CHIP	FORECAST	**********
	1986(4)	1987(4)	1988(4)	LATEST ACTUAL (2) 4/28/89	THIRD QUARTER 1989(2)	FOURTH QUARTER 1989(2)	FIRST QUARTER 1989(2)	SECOND QUARTER 1990(2)
Consumer		******	******	******	******	******		******
Price Index	1.9	3.7	4.1	5.4	5.2	5.1	5.0	4.9
GNP Deflator	2.7	3.3	3.4	3.9	4.8	4.6	4.7	4.5

STOCK INDICES

	12/31/87	12/31/88	% CHANGE	4/20/89	% CHANGE (5)
	*******	*******	*******		
S & P 500 .	247.08	277.72	12.40%	306.19	10.25%
Bow Jones Industrial Average	1938.83	2168.57	11.80%	2377.38	9.63%
Dow Jones Utility Average	175.08	186.28	6.4%	189.31	1.63%

⁽¹⁾ Moody's Band Survey

⁽²⁾ Blue Chip Financial Ferecasts, May 1, 1989

^{(3) %} change from prior years (4) Value Line, 4/21/89

⁽⁵⁾ Not Annualized

SELECTED INTEREST RATES

	4/19/89	YEAR AGO
DISCOUNT RATE	7.00%	6.00%
PEDERAL FUNDS	10.00%	6.88%
PRINE RATE	11.50%	8.50%
3-MONTH T-BILLS	8.71%	6.00%
6-MONTH T-BILLS	8.87%	6.50%
30-YEAR T-BONDS	8.95%	9.04%

SOURCE: Value Line Selection & Opinion, 4/28/89

DELL OPENATING COMPANIES

.77725139 0.7354 2.2371339	0.12031		SDARBA	******	S. WEST	TT38 .n.	SING T. SING	Mahr	ELLOCATH	ELL ATLATIC	MERITECH.		MANA
86 0.73435	MEIL		0.7996	::	3.76	2.66	1.85	6.30	2.52	4.40	2.92	:	1410
0.745506			_										SM6
besilve.	2!		0.0		4	N	N		Por	UI.	,		•
0.719529	-	A)	•		ů		U		:-;		3		2
0.697381	*		6.21	***	7.29	4.50	3.70	;; (%)	4.75	0,00	5.70	:	7543
0.725356	Ī.		75.70	****	13.00	13.50	14.50	14.50	15.00	15.00	15.00	:	ROE 4
0.705044			1.044		1.0656	1.0550	1.0674	1.0722	1.0715	1.0706	\$ 0473	:	21-4
0.685302	•		1.0533	*****	1.0478	1.0420	1.0568	1.0562	1.0521	1.0580	1.0579		* 783
0.666112					63.125	46.000	35.750	71.125	43.375	76.375	\$2.750		W - PR
0.60069	:				56.65	43.500	37.375	67.500	65.125	72.375	49.87	:	MARCH LO-PR
0.671536		00.00	OTO ES		60.875	25.73	34.563	69.313	41.750	74.375	50		AVER-PR
0.452720 (Ì											

AA/Aa RATED ELECTRIC INDEX

0.12166 0.12166	SOVERNA	*****	. RECO	SCHWEST. P.S.	SCATTR. CAL ED	CHANCE & ROCK	SED MACHINES	SALVIS REFOREMENT	TOL CHESONS	Branch Co.	SOUTH OF THE	SECTION AND SECTION	STATE STATES	CON ES	STO SECOND TWO	MUTERIEM AND	AND STREET AND AND A SIA		COMPANY
THE	0.6065	****	1.48	2.18	2.5	2.30	2.41	2.20	1.76	1.72	3.69	30.00	8 6	3.66	2.00	3.13	9	8 1 0 6	IAIG
	0.6326	****	1.57	2.27	2	2.5	2.52	2.33	1.00	1.81	3.36	10	9	5	2.20	3.29			SAIG
	0.6599		1.65	2	2.76	2.45	2.63	2.46	 %	1.90	S	3.21	10.00	8	2.5	3.4		-	SAIG
	0.6885		, i	2.65	2	2 65	K	2.60	2.00	2.00	3.50	3.40	00.00	200	24	3.60	***	****	DIVA
	3.79		250	3 8 8	3	4	5	N.	2.90	2.75	ů.	5.50	3.40	n 4	3	62.4	:	67.00	19d7
	13.77	70.00	20.00	3 3 3	25.50	50	3 :	8	13 50	13.50	12.50	13.50	13.30	10.00	200	12 65	::	6-3r/m	200
	1.0440	0.000	25.00	1466	1 20.00	1000	1000	1 0678	RA	1.05%	1.026	1.00	1.0516	1000	10000	202	:	6-1389	
	1,0368	0740°1	0000	1.0017	0000	1200.1	A Then a	4160*1	0000	1 0748	1 0221	1.0515	1.0350	1.0563	A130.1	4 0220		+ WIED	
		C3.000	27.000	32.300	002.00	33.000	20.00	AC1.22	22 560	N N	200	200	45.875	31.000	37.770	V35 6.8		MI-PR	
		2.10	0.00	31.000	002.72	32.373	30.230	61.00	061.13	25 260	17 17	62 750	20.22	28.500	33.00	900		CO-799	MARCH
	\$1,4952	22.563	26.313	31.750	27.750	52.608	30.938	22.108	00.55	33 360	20.00	267 27	65.250	29.750	30.000			AVER-PR	

0.58935315 0.572654 0.556429 0.563921 0.547944 0.532418 0.517333 0.524358 0.509562 0.495066 0.481639 0.487626 0.473809 0.446385 0.447341 22.79494 30.5561273 30.5503365

0.1258 9.1278

TIBAN

9.42048251 9.488209 9.394293 9.481610 0.389888 9.378507 9.367459 9.372420 9.361550 9.350996 9.344751 9.345380 0.335299 0.325512 0.316010 16.78568 22.2786623

ATLANTA GAS LIGHT BROOM, TH LANICH DIVERSIFIED CLERGY INDIAMA ENERGY LACLEDE GAS NORTHAEST HAT'L GAS PEOPLE'S ENERGY WASH, GAS LIGHT AVERAGE
1.90 1.70 1.76 1.79 1.79 2.78 1.61 1.56 1.58
91V2 1.85 1.86 1.24 2.37 1.63 2.04
2 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2 :
2.25 2.25 2.00 1.85 1.85 2.55 1.85 2.55 1.85 2.55 1.85 2.55 1.85
2.266
3.50 3.50 3.50 3.50 3.50
1.0580 1.0580 1.0585 1.0585 1.0585 1.0585 1.0587 1.0587 1.0587
1.0263 1.0433 1.0433 1.0433 1.0707 1.0560 1.0560 1.0567 1.0522
100 200 200 200 200 200 200 200 200 200
WARCH 10-PR 23.0000 23.0000 23.0000 36.375 28.676 38.750 38.750
AWR-PR 23.688 25.688 25.688 25.688 25.688 25.688 25.688 25.688 25.688

MODEL NO LINE LEGISTRIBILITY S. AGOCK

DCS CIRCI CT FORTER BUSINESS

MEMQRANDUM

August 18, 1989

TO:

WALTER D'HAESELEER, DIRECTOR OF COMMUNICATIONS JOE JENKINS, DIRECTOR OF ELECTRIC AND GAS CHUCK HILL, DIRECTOR OF WATER AND SEWER

FROM:

MARK CICCHETTI, CHIEF, BUREAU OF FINANCE /C

RE:

QUARTERLY REPORT ON EQUITY COST RATES

Attached are the results of our latest analysis regarding utility common equity costs. These figures represent Staff's estimate of the current cost of common equity for the companies indicated. Page 5 of the report is a brief summary of recent and current interest rates, inflation rates, and related forecasts. Some additional items that may be of further interest are:

- The Dow Jones Industrial Average has increased 24%, from 2168.37 to 2687.78, since the beginning of the year. The bond market has also rallied impressively over the same period with the yield on the long-term treasury dropping to 8.15% from approximately 9.0%. Additionally, the prime rate was recently lowered to 10.5% from 11%. Many capital market indices are at or near their all-time high. Consequently, in staff's opinion, utility common equity costs are at or near their lowest level in ten years.
- The economy continues to send mixed signals with sentiment seemingly changing daily from recession to stagfiation to "soft-landing." However, in general, it appears Fed actions have, at least for the time being, moderated economic growth and curbed inflation. Stay tuned.

Starting with this quarterly report, Staff will include cost of equity numbers that reflect the use of an annually compounded DCF model. The annually compounded model ignores the fact that investors receive dividends quarterly. Since the annually compounded model does not produce the effective required rate of return it is inappropriate to make an "effective rate to nominal rate" adjustment. Therefore, the results shown for the annual model do not incorporate any "compounding" adjustments. At current levels of required returns, (see page 3) the differences between the two approaches are within 20 to 40 basis points.

MC/1h

cc: Chairman Wilson
Commissioner Gunter
Commissioner Herndon
Commissioner Beard
Commissioner Easley
Dave Swafford
Bill Talbott
John Slemkewicz
Dale Mailhot
Joe McCormick
Marshall Willis
Bill Lowe
Bob Freeman
Economic Regulation Standards Control

	COMPO	MARTERLY (1)	COMPOU	UALLY (2)			
ELECTRICS	DCF	RISK PR	OCF	RISK PR	AUTHORIZED ROE RANGE	PER ORDER	ORDER NUMBER (4)
FLORIDA POWER (Aa3/A+)	11.0	11.6	11.2	11.6	49.40 49.40	******	
FPL (Aa3/A+)	11.0	11.6	11.2		12.60 - 13.60		
FPUC (Harianne)	11.5	12.1		11.6	14.60 - 16.60	13.6	20451
FPUC (Fernandina Sch)	11.5	12.1	11.8	12.2	12.35 - 14.35	13.35	21532
GULF POWER (A/A)	11.1	11.7	11.8	12.2	** ** **	13.5	20258
TAMPA ELECTRIC (Aa1/AA)	10.8	11.4	11.4	11.7	14.60 - 16.60	13.75	20451
, ,,,,,,,	10.0	11.4	11.0	11.4	13.50 - 15.50	13.6	20451
TELEPHONES							
ALLTELL	11.7	40.0					
CENTEL (A3/A+)		12.7	12.1	12.9	12.80 - 14.80	14.80	20517
FLORALA	11.3	12.3	11.6	12.4	11.75 - 13.75	13.75	17783
GENTEL (As2/AA-)	11.7	12.7	12.1	12.9	14.00 - 16.00	14.8	19165
OULF	11.0	12.0	11.3	12.1	14.50 - 16.50		
INDIANTOWN	11.7	12.7	12.1	12.9	12.80 - 14.80	14.8	19169
	11.7	12.7	12.1	12.9	12.00 - 12.75	14.5	21474
NORTHEAST	11.7	12.7	12.1	12.9	13.50 - 16.50	15.3	19165
QUINCY	11.7	12.7	12.1	12.9	12.30 - 14.30		20937
ST. JOE	11.7	12.7	12.1	12.9	14.00 - 16.00	14.8	19165
SOUTHERN BELL (Asa/AAA)	10.7	11.7	11.0	11.8	11.50 - 16.00		
SOUTHLAND	11.7	12.7	12.1	12.9	12.80 - 14.80		18957
UNITED (AAZ/A)	11.1	12.1	11.5	12.3	12.50 - 14.50	14.5	19726
GAS							
CENTRAL FLORIDA	11.8	12.5	12.1	12.7	12.00 1/.00		
CITY GAS	11.8	12.5	12.1	12.7	12.90 - 14.90 14.75 - 16.75		
FLORIDA PUBLIC	11.8	12.5	12.1	12.7	13.50 - 15.50	13.7	20636
GAINESVILLE	11.8	12.5	12.1	12.7	12.30 - 14.30	13.5	20258
INDIANION	11.8	12.5	12.1	12.7	12.30 - 14.30		20134
MILLER	11.8	12.5	12.1	12.7	14.75 - 16.75	13.7	20.00
PEOPLES	11.8	12.5	12.1	12.7	13.25 - 15.25	13.7	20636
PLANT CITY	11.8	12.5	12.1	12.7	15.70 - 17.70	13.7	20636
ST. JOE	11.8	12.5	12.1	12.7	12.70 - 14.70	13.7	20636
PALM BEACH COUNTY	11.8	12.5	12.1	12.7	15.25 - 17.25	13.7	19793
SOUTH FLORIDA	11.8	12.5	12.1	12.7	12.23 - 14.23	13.7	20636
SOUTHERN	11.8	12.5	12.1	12.7	14.75 - 16.75	13.7	20/2/
WEST FLORIDA	11.8	12.5	12.1	12.7	12.50 - 14.50		20636
			740.0	7.00.00	16.30 - 19.30		21054

WATER AND SEVER (3) The cost of equity obtained using the leverage formula is 11.76% at 100% equity and 13.95% at an equity ratio of 40% or lower. The current leverage formula is: COE = 10.30 + (1.46/Equity Ratio)

FOOTNOTES

⁽¹⁾ These results reflect the use of a quarterly compounded DCF model and were adjusted to the ratemaking rate of return.

⁽²⁾ These results were calculated using an annually compounded DCF model. The ratemaking rate of return adjustment was not applied.

⁽³⁾ PAA order to be issued 8/21/89.

⁽⁴⁾ The orders are described on the next page.

QUARTERLY REPORT ON EQUITY COST RATES

DESCRIPTION OF ORDERS

	ORDER NO.	DESCRIPTION
	20451	Sets 13.6% (FPL & TECO) and 13.75% (Gulf Power) as the equity midpoint in the calculation of an overall rate of return, for the AFUDC rate, and for surveillance purposes for 1989.
	20258	Sets 13.5% as the midpoint for the tax rule, carnings surveillance and AFUDC for Florida Public Utilities gas division & Fernandina Bch electric division.
	21532	Rate Case, FPUC Marianna Division. Established an ROE range of 12.35% to 14.35%, with a midpoint of 13.35%.
i	20517	Establishes an authorized ROE range for Alltel of 12.8% to 14.8% with a midpoint of 13.8% for all purposes.
•	17783	Establishes Centei's ROE within a range of 11.75% to 13.75%. Provides that in computing refunds for 1987 and 1988 the ROEs to be employed are 13.25% and 13.75%, respectively.
1	9165	Establishes a range of 13.5% to 16.5% with a midpoint of 15% for Northeast Florida Telephone beginning in 1988 for all future purposes. Provides for the recording of additional depreciation for earnings greater than 15.3% for 1988 and 1989.
		Sets an ROE celling of 14.8% for St. Joe for 1988 and 1989.
		Establishes a range of 14% to 16% with a midpoint of 15% for Florala for all future purposes. Provides for the recording of additional depreciation for earnings greater than 14.8% for 1988 and 1989.
1	9169	Sets ROE range of 12.8% to 14.8% for Gulf Telephone. Provides for a refund of 1988 earnings in excess of 14.8%.
1	8831	Sets ROE range of 12.8% to 14.8% for Quincy Telephone. Provides for a refund of 1988 earnings in excess of 14.8%.
1	8957	Sets authorized ROE at 12.8% to 14.8% for all purposes. Caps earnings at 14.8%.
1	9726	Sets ROE range of 12.5% to 14.5% with a midpoint of 13.5% for calendar years 1988 & 1989 for United Telephone of Florida to be used for all purposes.
1	9793	Stipulation, St. Joe Natural Gas. Supplants the Utility's last authorized ROE with a range of 12.7% to 14.7% with a midpoint of 13.7% for purposes of calculating future overearnings and for setting interim rates.
2	0636	Sets 13.7% as the midpoint in 1989 for tax rule purposes.
2	0134	Rate case, Gainesville Gas. Set ROE range of 12.3% to 14.3% with a midpoint of 13.3%
2	1054	Rate case, West Florida Nat'l Gas. Set ROE range of 12.5% to 14.5% with a midpoint of 13.5%.
2	1474	Caps Indiantown's earnings at 14.5% for 1988 and 1989.
20	0937	Changes Quincy's authorized range to 12.3% - 14.3% with a midpoint of 13.3%.

In Docket No. 880069-TL, the Commission set the following ROEs for Southern Bell:
11.5% - Authorized Floor
13.2% - Rate Setting Point
14.0% - Point at which sharing starts. (60% to ratepayers - 40% to Southern Bell)
16.0% - Authorized Ceiling after Sharing

INTEREST AND INFLATION RATES

INTEREST RATES

					*******	**** BLUE CHIE	FORECAST	************	
				AVERAGE	FOURTH	FIRST	SECOND	CHINT	
	******	ANNUAL AVERAGES	*****	JULY	QUARTER	QUARTER	QUARTER	QUARTER	
	1986(1)	1987(1)	1988(1)	1989(1)	1989(2)	1990(2)	1990(2)	1990(2)	
6			******	******	*******	******			
Ass Utility	8.92	9.52	10.05	8.98					
As Utility	9.30	9.77	10.26	9.23					
A Utility	9.58	10.10	10.49	9.50	9.3	9.3	9.3	9.4	
Bas Utility	10.00	10.53	11.00	9.64				7.4	
Prime Rate	8.28	8.10	9.44	10.50	10.2	10	9.8	9.8	*
Commercial									
Paper (30 day)	6.66	6.70	7.72	8.95	8.4	8.2	8	8.1	
Long Term									
Tressury Bond	8.19	8.70	9.04	8.16	8.1	8	8	. 8.1	

INFLATION RATES (3)

					********	**** BLUE CHIP	FORECAST	***********
	1986(4)	ANNUAL AVERAGES 1987(4)	1988(4)	ACTUAL (2) 7/27/89	THIRD QUARTER 1989(2)	FOURTH QUARTER 1989(2)	FIRST QUARTER 1989(2)	SECOND QUARTER 1990(2)
Consumer					******		•••••	
Price Index	1.9	3.7	4.1	6.4	4.7	4.8	4.7	4.6
GNP Deflator	2.7	3.3	3.4	4.9	4.5	4.6	4.4	4.4

STOCK INDICES

	- ·				
	12/31/87	12/31/88	% CHANGE	8/15/89	% CHANGE (5)
	*******	******			
S & P 500	247.08	277.72	12.40%	344.71	24.12%
Dow Jones Industrial Average	1938.83	2168.57	11.80%	2687.78	23.94%
Dow Jones Utility Average	175.08	186,28	6.4%	217.74	16.89%

⁽¹⁾ Moody's Bond Survey

⁽²⁾ Blue Chip Financial Forecasts, August 1, 1989

^{(3) %} change from prior years

⁽⁴⁾ Value Line, 8/11/89

⁽⁵⁾ Not Annualized

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Gulf Power Company for an increase in its rates and charges

Date filed: 10/18 00

Certificate of Service

I HEREBY CERTIFY that a copy of the foregoing has been furnished this 18th day of October, 1990 by hand delivery or U.S. Mail to the following:

Jack Shreve, Esquire (by hand)
Public Counsel
Florida House of Representatives
The Capitol
Tallahassee, FL 32399-1300

Robert Vandiver, Esquire Michael Palecki, Esquire Marsha Rule, Esquire Florida Public Service Commission 101 East Gaines Street Tallahassee, FL 32399-0863

Major Gary A. Enders HQ USAF/ULT Stop 21 Tyndall AFB, FL 32403-6001 John W. McWhirter, Jr., Esquire Lawson, McWhirter, Grandoff & Reeves P.O. Box 3350 Tampa, FL 33601

Joseph A. McGlothlin, Esquire Lawson, McWhirter, Grandoff & Reeves 522 E. Park Avenue, Suite 200 Tallahassee, FL 32301

Richard Chais ORI, Inc. 1375 Piccard Drive Rockville, MD 20850

G. EDISON HOLLAND, JR.
Florida Bar No. 261599
JEFFREY A. STONE
Florida Bar No. 325953
TERESA E. LILES
Florida Bar No. 510998
Beggs & Lane
P.O. Box 12950
Pensacola, FL 32576
(904) 432-2451
Attorneys for Gulf Power Company