BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 900151-GU

PETITION OF

FLORIDA PUBLIC UTILITIES COMPANY

- GAS OPERATIONS -

TO INCREASE ITS RATES AND CHARGES

Address communications in connection with this Petition to:

F. C. Cressman, President
Florida Public Utilities Company
P. O. Drawer C, 401 South Dixie Highway
West Palm Beach, Florida 33402

AND

William E. Eaton, Jr., Esquire
Suite 301 Flagler Court Building
215 Fifth Street
West Palm Beach, FL 33401

Date: June 29, 1990

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

IN RE: PETITION OF FLORIDA PUBLIC UTILITIES COMPANY, GAS OPERATIONS, TO INCREASE ITS RATES AND CHARGES

DOCKET NO. 900151-GU

Florida Public Utilities Company, a Florida Corporation, hereinafter called Petitioner or Company, being a natural gas utility regulated by the above Commission hereby presents the following Petition pursuant to Section 366, Florida Statutes, pertaining to its rates and charges for gas service, and respectfully represents unto the Commission as follows:

1. The exact name and address of the principal business office of the Petitioner is as follows;

   Florida Public Utilities Company
   401 South Dixie Highway
   West Palm Beach, Florida 33402.

2. Petitioner was incorporated by letters patent by the State of Florida on March 6, 1924 under the name of Palm Beach Gas Company. By subsequent amendment the name was changed to Florida Public Utilities Company on October 24, 1927. On April 25, 1929 the Company was incorporated under the 1925 Florida Corporation Law and is continuing its corporate existence pursuant to the 1925 Corporation Law and its Certificate of Re-Incorporation, as amended.

3. The names and addresses of persons authorized to receive notices and communications in respect to this Petition are as follows:

(See cover page hereof)

4. Petitioner is engaged in business as a gas utility distributing and selling natural gas to approximately 35,000 customers in its West Palm Beach, Sanford, and DeLand divisions located in Palm Beach, Seminole, and Volusia County, respectively.

5. Petitioners present base gas rates have been in effect without increase since June 6, 1986, Commission Order No. 16195 in Docket No. 850172-GU.

6. Because of increased utility operating costs, increased plant replacement costs, and the need for additional plant investment, the Petitioner requested in February 1990 permission to use the 12 month period ended December 31, 1989 as a historic base year and the 12 month period ending December 31, 1991 as the projected test year for increasing rates and charges. The Commission has granted this request and assigned the case under Docket No. 900151-GU.

7. Petitioner is presently earning an adjusted return on its 1989 average rate base of approximately 5.91% and represents that a return of 5.91% does not provide reasonable compensation to the Company's stockholders and is not sufficient to attract new capital. The Petitioner further calculates that its present rates and charges would permit the Company an opportunity to earn an adjusted rate of return of only 3.71% in 1991.

8. Petitioner requests approval to increase its rates by the amount of $2,022,050 per annum, which amount will allow a fair and reasonable rate of return of 9.05% on the 1991 allowable rate base.

9. In support of the increases in rates and charges, petitioner attaches the following items and makes them part of this petition:

a) Minimum Filing Requirements Sections A, B, C, D, E, F, G, H, and I.	Accounting, Financial Engineering, Statistical and Rate Data as Required by Rule 25-7.39(1)(a)(1)
b) Testimony and Exhibi of the following Company Witnesses: Darryl L. Troy-Accounting	Direct Testimony and Exhibits as Required by Rule 25-7.39(1)(a)(3)

George M. Bachman-Plant in Service

Cheryl M. Portner-Income Taxes

Marc L. Schneidermann-Cost of Service/Rates

Charles L. Stein-Rates/Distr. Operations

Robert S. Jackson-Cost of Equity

Kenneth C. Kessler-Marketing

10. Further deterioration of earnings is certain unless at least partial interim relief is granted by the Commission in accordance with Section 366.071, Florida Statutes.

In order to expedite the urgently needed interim relief, the Company asks that the interim relief be premised upon the "required rate of return" of 8.96% as calculated per Section 366.071(5)(B)(2), Florida Statutes.

Petitioner's overall interim relief increase requested herewith is $990,570 or 4.2% of the Company's total sales revenue in the 1989 test period. The calculation of the revenue required to achieve the "required rate of return" is included in Section F filed herewith.

The Petitioner will allocate the interim rate increase applicable to all of Petitioner's filed rate schedules in accordance with Commission policy.

In filing this request for interim relief the Petitioner recognizes that any collections pursuant to such interim relief would be subject to refund to the extent ultimately found by the Commission to be not justified.

The Petitioner fully understands and agrees to refund any portion found to be not justified. Because of the need for urgent relief, and because any delay in such relief will create an undue hardship, the Petitioner requests that interim relief be granted forthwith, without further hearings, on the basis of prima facie showing made by the Petitioner.

WHEREFORE, Florida Public Utilities Company moves the Commission on the basis of the record herein to:

1) After adequate notice and hearing, enter its final order allowing Petitioner a permanent increase in its gas rates and charges in Palm Beach, Seminole and Volusia Counties by an amount of approximately $2,022,050 per annum as herein outlined; and

2) Enter its order that until such permanent relief is granted the Petitioner shall be allowed interim relief in the amount of $990,570 per annum by permitting an increase in rates to become effective forthwith without future hearings, subject to refund; and prescribing such bond and refund provisions as the Commission may determine to be necessary and appropriate for the protection of the Petitioner's customers in the event some portion of the authorized interim increase should prove excessive on final determination by the Commission.

RESPECTFULLY submitted this 29th day of June, 1990.

FLORIDA PUBLIC UTILITIES COMPANY

By F. C. Cressman
F. C. Cressman
President

ATTORNEY FOR PETITIONER

By
William E. Eaton, Jr., Esq.
Suite 301 Flagler Court Bldg.
215 Fifth Street
West Palm Beach, FL 33401
(407) 655-3077

STATE OF FLORIDA)
)
COUNTY OF PALM BEACH)

F. C. Cressman, being duly sworn, on oath deposes and says:

That he is President of Florida Public Utilities Company, the above named Petitioner, and as such officer he is duly authorized to and did execute the above and foregoing Petition; that he has read the same and that to the best of his knowledge and belief the matters and facts set forth herein are true.

F. C. Cressman
F. C. Cressman

Sworn to and subscribed before me this 29th day of June, 1990.

Ethel M. Davis
Notary Public

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXP. MAY 4, 1993
BONDED THRU GENERAL INS. UND.

(Notary Seal)

DIRECT TESTIMONY
OF
DARRYL L. TROY

IN

FLORIDA PUBLIC UTILITIES COMPANY
DOCKET NO. 900151-GU

IN RE: PETITION OF
FLORIDA PUBLIC UTILITIES COMPANY
FOR A RATE INCREASE IN THE
NATURAL GAS OPERATIONS

Q. Please state your name and address.

A. Darryl L. Troy, 401 South Dixie Highway, West Palm Beach, Florida 33401.

Q. By whom are you employed?

A. Florida Public Utilities Company.

Q. How long have you been so employed?

A. Since February 1964.

Q. Will you please state briefly your experience in the utility business.

A. I was employed in February 1964 by Florida Public Utilities Company as an accountant in the general accounting department in West Palm Beach, Florida. In 1966 I was made a special accountant of the Company; in 1973 Assistant Secretary and Assistant Treasurer; in 1974 accounting office manager; in 1979 manager of special accounting department; and in 1988 Director of Internal Audit.

Q. Have you previously testified before the Florida Public Service Commission on accounting and/or rate matters for

Florida Public Utilities Company?

A. Yes, I have. Dockets No. 750200-W, 800059-W, and 860662WU, for rate relief in Fernandina Beach Water Operations, Dockets No. 770652-EU and 880558-EI for rate relief in Marianna electric operations, Docket No. 881056-EI for rate relief in Fernandina Beach electric operations, and Dockets No. 800414-GU, 820249-GU and 850172-GU for rate relief in the gas operations.

Q. Florida Public Utilities Company filed a petition with the Commission requesting an adjustment of rates in its natural gas operations. I hand you Petitioner's Exhibits _____ and ask you to identify them.

A. These are the Executive Summary, Rate Base, Net Operating Income, Rate of Return and Miscellaneous Schedules which comprise the minimum filing requirements as required by Rule 25-7.039, F.A.C.

Q. Mr. Troy, were these exhibits prepared under your supervision and direction?

A. Yes, they were.

Q. Why is it necessary for Florida public Utilities gas operations to seek rate relief at this time?

A. The gas operations were last granted permanent rate relief on June 6, 1986 and at that time were authorized a 9.06% overall rate of return. The gas operations adjusted rate of return as of December 31, 1989 was 5.91%. Based on Company projections and excluding any rate relief, the adjusted rate of return is expected to drop to 4.14% by December 31, 1990 and 3.71% by December 31, 1991.

The Company needs rate relief due to the cumulative effects of inflation on construction and operating costs. Replacing aged utility plant that has been retired due to deterioration can cost up to twenty times more than the originally installed cost. Inflation has made it impossible to earn a fair rate of return on rate base with our current gas rates.

Without rate relief to provide a fair return on its investment, the Company will be unable to raise the capital necessary to finance future customer growth and maintain a satisfactory level of customer service.

Q. Mr. Troy, please make any explanations you feel are necessary to your identified exhibits.

A. The historic test year approved for this rate proceeding is the 12-month period ended December 31, 1989. Sections "B", "C", "D", "F" and "I" include data for the historic test year. I have also submitted in the booklet entitled <u>Section "G", Projected Test Year Schedules</u>, projected data for the years, December 31, 1990 and 1991. Section "A", Executive Summary, includes a summary of data presented in this current rate case with data in our previous rate case filed in 1985. On Schedule B-2, we have a book rate of return on rate base of 5.27% for the historic test year. After pro-forma adjustments, the return is increased to 5.91%. In order to earn a rate of return of 9.07% on historic rate base, it will be necessary to produce additional revenues of $1,026,240 (Schedule C-1). After making necessary projection adjustments to both rate base and operating income the projected December 31, 1991 return is reduced to 3.71% (Schedule G-2, p.1). In order to earn a projected rate of return of 9.05% on projected rate base, it will be necessary to receive an additional revenue increase of $995,810. Combined, the total revenue deficiency is $2,022,050 (Schedule G-5).

Q. How did you arrive at the 9.07% historic test year rate of return and the 9.05% projection year rate of return?

A. Schedule D-1 shows the Company's thirteen month average source of capital and related cost of that capital for the historic test year. All costs, with the exception of cost of common equity, are taken from historical costs as recorded on Company books. The cost of common equity of 13.85% is recommended by our cost of money witness, Robert S. Jackson of Stone & Webster Management Consultants, Inc. Schedule G-3, p. 2, shows the Company's capital and related costs for the projection year. The additional financing and other changes in ratios and costs have produced a necessary return on 1991 rate base of 9.05%.

Q. What adjustments were made to the book figures to arrive at the Company historic test year rate of return of 5.91%?

A. I have made numerous adjustments to book revenues and expenses. These adjustments, which are detailed on Schedule C-2, recognize non-recurring expenses, out-of-period items, book corrections and transfers to non-regulated operations. I have removed from revenues and expenses all purchased gas costs and related revenue taxes in keeping with Commission policy. Such costs are recovered through the purchased gas adjustment (PGA).

The Company-use portion of purchased gas has been added to historic test year expense.

I have removed the revenue derived from the sale of propane to our subsidiary, Flo-Gas Corporation. Sales of propane and the associated costs and plant investment are non-regulated and therefore these transactions have been removed from the book figures.

Odorant expense was decreased to reflect only the cost of odorant used during the historic test year. Odorant is bought and expensed in bulk quantities every few years.

Uncollectible accounts expense has been adjusted downward to the average charge-off rate over the three year period ended December 31, 198[illegible]

Undistributed payroll had a credit of $11,200 recorded in January 1989 to correct an error made in 1988. This credit was out-of-period and therefore removed from the 1989 historic test year.

FERC regulatory expense in 1989 of $128,554 was related to the multiple filings by Florida Gas Transmission Company (FGT) for a rate increase, an extensive change in rate design and FGT's proposal to become an open access pipeline. Florida Public Utilities Company was an active intervenor in all of those FGT filings. I have reduced the 1989 expense by $85,703 to $42,851 which is an average annual recurring cost to protect the Company's interest before FERC. While some of the 1989 filings of FGT have been resolved, a recent FERC order has remanded the rate design issues for hearing. In addition, FGT will have another rate filing in 24 months when it's authorized capacity expansion program is completed.

Outside services expense has been increased by $2,400 annually to recover one-fifth of the cost of preparing the Commission-required depreciation study. Stone & Webster Management Consultants, Inc. has estimated the cost of such study at $12,000.

System mapping expenses in the amount of $12,900 have been removed from the test year due to the completion of such project in the Sanford division.

Repairs made to the West Palm Beach warehouse roof in the amount of $8,682 have been removed from test year expense due to a five-year warranty on the work done and the infrequent need of such repairs.

I have made other credit adjustments to remove newsletter expense, L. P. piping allowances and merchandise advertising which are unrelated to natural gas operations.

Depreciation expense has been adjusted downward $32,097 due to the removal from rate base of non-regulated merchandise and jobbing plant investment, and portions of general plant accounts allocated to non-regulated Flo-Gas operations. The plant in service depreciation expense was recomputed for the test year 1989 and resulted in a credit adjustment of $4,776 to the book figures.

Taxes other than income taxes have been adjusted downward $27,937 to remove property taxes on the general office, L. P. and merchandise plant that relate to operations other than natural gas.

State and Federal income taxes have been adjusted for the tax effect of all the above pro-forma adjustments, the removal of prior period adjustments and synchronization to the interest expense in the capital structure.

Q. The adjustments have caused an increase in the Company's operating income. Would you please indicate the dollar amount of such increase?

A. The aforementioned adjustments have increased operating income $98,069.

Q. Have any adjustments been made to book rate base?

A. Yes. Net utility plant in service was decreased $529,603 per plant adjustments made by Company witness, Mr. Bachman, on Schedule B-3.

Working capital requirements were computed on the balance sheet method and amount to a negative $135,645 for the historic test year.

Q. What projection adjustments have been made to the adjusted historic test year to arrive at the projected test year ending December 31, 1991?

A. The projection adjustments which are shown in summary form on Schedules G-1, p. 1 and G-2, p. 1 are detailed in Schedules G-1, p. 4 and G-2, pp. 2 and 3. The assumptions and methodologies used for the projection are also detailed in Schedule G-6.

A few of the projection year adjustments I would like to direct attention to are as follows: Current rate case expense of $48,700 is being amortized over three years which is the average length of time between rate cases. The Company's gas operations have filed for rate relief in years 1976, 1980, 1982 and 1985. The last three were filed over a nine-year period. The reasons we have held off for five years in the present case are the reduction in the Federal income tax rate from [illegible]% to 34% in 1987 and the Company's filing of two rate cases in our electric operations in 1988 and 1989.

The projected first class postage rate increase of five cents which is tentatively scheduled to go into effect in February 1991 has been pro-formed into accounts 903 and 921 for the projection year 1991. The effect of this adjustment is approximately $26,300 in increased expenses.

Routine maintenance work which will be performed annually has been pro-formed into the projection year. This includes $4,802 for the cost of painting two gate stations annually and $4,802 for annual inspections of subaqueous crossings. The Company owns ten gate stations which will be sandblasted and painted every five years (two per year). Of the Company's seven subaqueous crossings two will be inspected annual and the remaining five inspected every three years.

The adjustment in employee group medical insurance of $79,610 over the historic test year is due to medical claims experience in the past two years.

The above adjustments to the projection year are reflected in the various expense accounts listed in Schedule G-2, pp. 10-18.

The Company has also included in the projection year expense related to the amortization of costs associated with the environmental testing and remediation of old manufactured gas plant sites in the West Palm Beach and Sanford divisions. The two sites are in various stages of testing.

The adjustment to increase amortization expenses by $239,600 represents a ten-year amortization schedule of the projected costs associated with these gas plant sites (Schedule G-2, p. 24).

Q. What is the net change in rate base and operating income as a result of the projection adjustments?

A. The rate base has increased $3,303,705 and the operating income has decreased $312,294.

Q. Mr. Troy, would you please tell us again what the total revenue deficiency is and what percent increase this is over present billings?

A. The total revenue deficiency is $2,022,050 and represents 8.6% increase over the test year 1989 total billings to all natural gas customers.

Q. Is interim relief being requested in this rate proceeding?

A. Yes. In accordance with Section 366.071, Florida Statutes, the Company is requesting $990,570 in annual interim relief. This interim relief will allow the Company to earn 8.96% on test year rate base utilizing the "floor" of our last authorized return on common equity in Docket No. 850172-GU. The rate base and operating income data used for interim relief purposes is the adjusted historic test year 1989. The interim relief data is included in MFR Section F.

Q. Does this complete your testimony?

A. Yes, it does.

DIRECT TESTIMONY
OF
GEORGE M. BACHMAN

IN

FLORIDA PUBLIC UTILITIES COMPANY
DOCKET NO. 900151-GU

IN RE: PETITION OF
FLORIDA PUBLIC UTILITIES COMPANY
FOR A RATE INCREASE IN THE
NATURAL GAS OPERATIONS

Q. Please state your name and business address.

A. George Bachman. My business address is 401 South Dixie Highway, West Palm Beach, Florida 33401.

Q. By whom are you employed and in what capacity?

A. I am employed by Florida Public Utilities Company as the Accounting Manager.

Q. Please briefly outline your educational qualifications and professional experience.

A. I received a Bachelor of Science degree in Business Administration, with a concentration in Accounting, from Indiana University in 1981.

I was subsequently employed by a division of Southeastern Public Service Company, where I was the Assistance Controller when I left in January of 1985 to join Florida Public Utilities Company. At Florida Public Utilities Company I was employed as the General Accounting Office Manager. In April, 1989 I was made the Accounting Manager.

Q. Have you previously testified before the Florida Public Service Commission?

A. Yes. Docket Number 881056-EI for rate relief in the electric operations.

Q. What is the purpose of your testimony in this proceeding?

A. To sponsor the schedules relating to Plant in Service, Plant Reserve, and Depreciation. These schedules include the historic and projected balances of Utility Plant in Service, Plant Reserve, and associated depreciation expense. They are included in the MFR schedule sections "B", "C", and "G".

Q. Were the schedules prepared under your supervision?

A. Yes.

Q. Please summarize how the schedules were prepared.

A. The historic schedules B-2 through B-12 and C-17 through C-19 were based on actual 1989 data. Plant additions and retirements for 1990 and 1991 were forecast by Mr. Chuck Stein, Manager of Gas Operations. The forecast changes in Plant were applied by account for each month, and are reflected on schedules G-1 page 1 and G-1 pages 4 through 28. Adjustments to plant balances were made allocating non-utility General Plant out (deduction), and adding the Gas portion of Common Plant in (addition) to the forecast. Depreciation projections were made using the projected plant balances and current depreciation rates. Amortization projections were based on the current amortization plus new

amounts. These are on schedules G-2 pages 20
25.

conclude your testimony?

DIRECT TESTIMONY
OF
CHERYL M. PORTNER

IN

FLORIDA PUBLIC UTILITIES COMPANY
DOCKET NO. 900151-GU

IN RE: PETITION OF
FLORIDA PUBLIC UTILITIES COMPANY
FOR A RATE INCREASE IN THE
NATURAL GAS OPERATIONS

Q. Please state your name and business address.

A. Cheryl M. Portner, 401 South Dixie Highway, West Palm Beach, Florida 33401.

Q. By whom are you employed?

A. Florida Public Utilities Company.

Q. Please outline your educational qualifications and work experience.

A. I graduated from Florida State University in December of 1984 with a Bachelor of Science degree in Accounting and Finance. I was employed in March of 1985 by Florida Public Utilities Company as an accountant in the general accounting department in West Palm Beach, Florida. In 1987 I was made the tax accountant in the accounting department, and in 1989 I was made assistant accounting manager in the accounting department.

Q. What are your duties as Assistant Accounting Manager?

A. To supervise, train, review, and assist in planning the activities of the accounting department. Direct and assist in the preparation of monthly, quarterly and annual financial, statistical and accounting reports. Supervise the preparation of all local, state and federal tax returns.

Q. Have you previously testified before the Florida Public Service Commission on accounting and/or rate matters for Florida Public Utilities Company?

A. Yes, I have. Docket 881056-EI for rate relief in our Fernandina Beach electric operations.

Q. Will you please identify the area and any prefiled exhibits that you are a witness for in this proceeding?

A. I am testifying on income taxes for the historic test year, December 31, 1989; historic base year + 1, December 31, 1990; and projected test year, December 31, 1991. The exhibits I have prepared or which were prepared under my direction are as follows: Schedules B-17, B-18, C-20, C-21, C-22, C-23, C-24, C-25, C-27, C-28, C-29, G-2 p. 26, G-2 p. 27, G-2 p. 28, G-2 p. 29, G-2 p. 30 and G-2 p. 31.

Q. Please make any explanations you feel are necessary to these exhibits.

A. We have adopted the method for calculating deferred taxes on property related items using the Commission-approved methodology established in our two recent electric rate proceedings, Docket No. 880558-EI and Docket 881056-EI

(Marianna and Fernandina Beach). The Commission approved the staff recommendation as to the methodology of refunding excess deferred income taxes. The FPSC staff recommendation separated unprotected non-base items from other property related items. The turn-around for non-base items begins in the year immediately after the asset is placed into service and associated deferred taxes are returned over the remaining lives of the related property. All other property related items, such as depreciation differences and cost of removal, use the average rate assumption method once turn-around begins.

Q. What effect will this methodology have on the overall effective tax rate for the projected years 1990 and 1991?

A. The initial amount of deferred tax expense that had to be adjusted resulting from the change in accounting for deferred tax expense on property related items is being amortized over the average remaining life of the property. This change was made effective in 1989 and will be amortized over 13 years. The annual amortization expense will be a credit of $12,255 and will cause the effective tax rate to deviate from the current expected rate of 37.63%.

Q. Does this complete your testimony?

A. Yes.

DIRECT TESTIMONY
OF
MARC L. SCHNEIDERMANN

IN

FLORIDA PUBLIC UTILITIES COMPANY
DOCKET NO. 900151-GU

IN RE: PETITION OF
FLORIDA PUBLIC UTILITIES COMPANY
FOR A RATE INCREASE IN THE
NATURAL GAS OPERATIONS

Q. Please state your name and business address.

A. Marc L. Schneidermann, P. O. Drawer C, West Palm Beach, FL 33402.

Q. By whom are you employed and in what capacity?

A. I am employed by Florida Public Utilities Company as Staff Engineer.

Q. How long have you been employed by Florida Public Utilities Company?

A. Since February 1989.

Q. Please state briefly your educational background and employment experience.

A. I earned a Bachelor of Science Degree in Mechanical Engineering from the Polytechnic Institute of New York in 1983. I received a Masters Degree in Management with a concentration in Energy Management, from Polytechnic University dur[illegible] 1986. I am a certified Intern Engineer in the State of New York.

Since being employed by Florida Public Utilities Company, I have been involved in various engineering and operations projects. I have analyzed the Company's sales in order to propose D-1 and D-2 contract levels on the Florida Gas Transmission Company's pipeline as well as for the preparation of the Company's budget.

Prior to joining Florida Public Utilities Company I was employed in excess of five years by The Brooklyn Union Gas Company (BUG).

In my last position with BUG, I was responsible for negotiating contracts for procuring and transporting 40% of the BUG's natural gas supplies. As such, I was accountable for approximately $79 million annually.

While employed in other capacities, I conducted gas supply forecasting, load research, gas supply planning and economic and financial cost studies for BUG. I was responsible for engineering design and operational projects at the Company's Liquified and Synthetic Natural Gas plants. Additionally, I was responsible for the daily management of the BUG's natural gas dispatching operations.

Q. Have you previously testified before this Commission?

A. No.

Q. What are the subject matters of your testimony in this proceeding?

A. My testimony will relate to three specific matters. First, I performed the studies and developed the projections of customers and therm sales for the projected years 1990 and 1991. Second, I conducted the cost of service study by rate class which formed the basis for allocating the proposed revenue increase among the rate classes. Third, I have drafted the proposed gas transportation rate schedules that the Company is submitting for approval as a part of this rate proceeding.

Q. Please generally describe how the estimates of customers and therm sales were developed for the 1991 projected test year.

A. First a detailed analysis was made of the historical monthly data of customers and sales by rate class in each of the three gas divisions for the years 1987-1989. These analyses formed the basis for making the projections by months for 1990 and 1991 At the time these projections were finalized the actual data for January to March 1990 were available and were incorporated into that year's data. Thus 1990 consists of three months actual and nine months estimated. The monthly projections were made by divisions by rate class after consultation with the divisional managers and marketing people for local input as to customer additions and any special large customers that were expected to be added in the projection period. For the non-interruptible rate classes monthly average usage factors were developed in each division from historical data and then applied to the projected number of customers of the respective rate classes. The sales to any known new large commercial/industrial customer were added separately based on usage estimated by the marketing people. All of the divisional projections of customers and sales were then combined by rate class and used as the billing units for revenue estimates and where applicable the cost estimates for the projected test year 1991 in this proceeding.

Q. How were the projections for sales to the interruptible rate classes made?

A. The Company has two interruptible rate classes: Interruptible Service (IS) which consists of 15 customers and the Large Volume Interruptible Service (LVIS) which has one customer, a municipally-owned electric generation plant. There have been few changes in recent years in the IS rate class. One customer was added during 1989 when an existing firm gas customer switched to IS and the projected sales reflect an estimate of that customer's usage on an annualized basis. It is expected that one additional IS customer will come on line during 1991 and the estimated sales to that customer were included in the 1991 total IS sales. Sales to the existing IS customers were projected based on historical data and input from the divisional managers. The projected sales to the one LVIS customer are the monthly estimates that the customer provided to the

Company. We requested the customer to provide those estimates and we have made no changes to his projections.

Q. Do you have anything further to add with respect to the 1990 and 1991 projected billing units?

A. Only to state that we believe our estimates have been developed through a detailed analysis of historical data and that the projected customers and sales can reasonably be expected to occur.

Q. Turn now to the Cost of Service study that you have stated you conducted. What is a cost of service study and why is it needed?

A. Basically, a Cost of Service study is a means of assigning costs to the various rate classes in a manner to reflect each class's causation of costs. Such studies require data input from accounting, engineering and customer billing and sales records to develop how costs may be allocated. The Cost of Service study is needed in order to determine the revenue requirements of each rate class and to serve as a guideline for setting price levels of each class.

Q. Which MFR Schedules is the Cost of Service set out on?

A. It is in MFR Schedules H-1, H-2 and H-3.

Q. What methodology was used in this cost study?

A. The Commission's Rate Staff has Lotus spreadsheets for gas utilities which they use in rate cases. The Staff provided us with copies of the spreadsheet files and we have utilized their program for our cost of service study. Therefore, the methodology and format in MFR Schedules H-1, H-2 and H-3 are basically the same as Staff uses.

Q. Is it your intention to describe all the details of the cost of service study?

A. No. Since we have adopted Staff's computer program, I don't think it necessary to go into all the details. We did make several adjustments to the program that we believe are necessary to more properly reflect costs in our system. I will describe those adjustments later in my testimony.

Q. What year was used for the cost study?

A. The study is based on the 1991 projected test year costs and revenue requirements. The data input for the study are from the MFR E Schedules and certain accounting schedules for that year.

Q. What kind of results does the cost study program produce?

A. It produces the rates of return of each rate class under present tariff rates and then computes the class revenue requirements needed for all classes to achieve the same rate of return level as the overall return (Rate of Return Index of 1.0 for all classes) under the scenario of the total proposed revenue increase being applied. It then further computes the tariff rates needed to achieve these revenue requirements. Page 277 of MFR Schedule H-1 compares rates of return under present and proposed rates. Page 278 of H-1 sets out the summary of the cost study under equalized rates of return while page 279 of that Schedule similarly shows the summary results under present rates. Page 276 H-1 shows the computation of tariff rates needed to achieve equalized rates of return. As will be described by Witness Charles Stein the Company is not proposing that all tariff rates be set at equal rates of return. Therefore, to set out the results of the Company's proposal I have added pages 273, 274 and 275 to MFR Schedule H-1. Page 273 shows the computation of the Company's proposed rates. Page 274 sets out the comparison of returns under present rates and the Company's proposed rates. Page 275 provides the summary of the cost study with the Company's proposed rates.

Q. Was it your decision not to have equal returns for all classes?

A. No. That decision was made by management and the reasoning for that will be covered in Witness Stein's testimony. I produced pages 273, 274 and 275 to show the results of that decision.

Q. Earlier in your testimony you stated that you made several adjustments to Staff's program in the cost of service study. Please describe them.

A. Two adjustments were made. First, under Staff's program the Peak and Average method for allocating capacity costs is used. The adjustment here was to reflect that the capacity costs of mains for the interruptible rate classes should be adjusted to recognize that they are interruptible customers (IS) subject to curtailment during peak periods. There have been occasions in the past when these customers have been curtailed due to system capacity limitations. Also in the future now that our pipeline supplier will have a demand-commodity rate structure, our interruptible customers will be subject to curtailments by the Company so that we can stay within our contract demands on peak days. We think it proper that the interruptible classes not be responsible for peak capacity costs of mains. With respect to the LVIS class that one customer has dedicated mains from the city gate station to his location. No other customers are served from those dedicated mains. Thus the main capacity costs to the LVIS customer are the booked costs of those mains as set out in the property records. All other capacity costs (except mains) were allocated to the IS and LVIS classes on the basis of the peak and average method.

Q. What was the second adjustment made to the cost of service study?

A. That adjustment was in the allocation of income taxes. Under the Staff's program, the allocator for income taxes in some cases is rate base and other cases pretax income without recogniti[illegible] of taxable income of each rate class. While a rate base allocator is mathematically true when the returns of all classes are equal it does not show proper income taxes when returns are not equal. Also we believe taxes should be computed based on taxable income rather than pretax income. Therefore, we have adjusted income taxes to the classes utilizing the same method of calculating taxes as used on a total company basis. The calculation of income taxes and the adjusted returns are set out on the bottom part of Pages 275, 278 and 279 of MFR Schedule H-1. These adjusted income taxes are based on the taxable income of each rate class. Also Investment Tax Credits (ITC) have been separated from total income taxes and allocated separately based on rate base since ITC is related to plant investment.

Q. Did you verify your income tax calculation procedures with others in your Company?

A. Yes. I had our tax witness, Cheryl Portner, review the methodology and she has agreed that the procedure is proper.

Q. Now I refer you to the gas transportation rate schedules that are set out in MFR Schedule E-9 pages 261 to 272. Did you prepare these proposed rate schedules?

A. Yes, I did.

Q. Why is the Company proposing these rates?

A. Now that our pipeline supplier, Florida Gas Transmission Company (FGT), has received FERC approval to become an open access pipeline we think it prudent that we have approved transportation rates in place in case any customers on our system decide to purchase their gas supplies from third parties and have the gas transported to them by FGT to our city gate stations and then delivered to the customer through our system.

Q. Has any customer or potential customer of your Company requested gas transportation?

A. Not at the present time nor are we aware of any customers that are contemplating to do so in the near future.

Q. If those transportation rates were approved, will they have any impact on the projected revenues of this instant rate proceeding?

A. No. As I've said we simply want to have approved transportation rates in place so that they are available if and when we have requests for gas transportation.

Q. Please briefly describe the proposed transportation rates.

A. We are proposing three such rates. One would be for firm transportation (Large Volume Transportation Service - LVTS) similar to our sales service LVS; one for interruptible transportation (Interruptible Transportation Service - ITS) that would be applicable to customers that otherwise would receive sales service under the IS rate schedule; and one for large volume interruptible transportation (Large Volume Interruptible Transportation Service - LVITS) for any customer that would otherwise fall under the LVIS sales service.

Q. Did you include transportation service in the cost of service study?

A. No. Since we have no such service now it was not possible to provide for it in that cost study.

Q. How did you set the rate levels for these transportation rate schedules?

A. I have set the commodity prices at the same level as the non-gas energy charge in the comparable sales service rate schedule. At the present time I see no reason to differentiate the cost to transport third party supplied gas from the cost of transporting the same volume gas that the customer has purchased from the Company. With respect to the monthly customer charges those are based on the customer charge in the comparable sales service rate schedule. We have added a Transportation Administration Charge.

Q. Do you have any further explanation on the transportation rate schedules?

A. Yes. A Transportation Administration Charge has been included within the transportation rate schedules. The purpose of this charge is to compensate the Company for the incremental costs associated with providing these transportation services. These costs are above and beyond the cost of providi[illegible] similar sales services.

Throughout each month, the Company will have to place daily nominations with Florida Gas Transmission for the amount of gas that each transportation customer requests to flow to the Company's gate stations and ultimately to each transportation customer's meter(s). All deliveries at the Company's various gate stations. for the account of each transportation customer, will have to be monitored daily. The Company will also have to monitor the daily amount of gas each transportation customer received at his meter. The Company will then have to compare the amount of gas that was delivered for each transportation customer's account with the amount of gas that each transportation customer received and determine the imbalance by source of supply that is being carried by the Company for each transportation customer. The Company will have to notify all transportation customers that have an imbalance and determine the Company's recourse to eliminate the imbalance. The quantities of gas transported by FPUC will potentially have a bearing on the number of supply sources that a transportation customer utilizes. As such, the number of imbalances, nominations, etc. that FPUC will have to handle increases proportionately with the quantities of natural gas transported through FPUC's distribution systems. For these reasons, the Company is proposing to base the Transportation Administration Charge on the quantities of natural gas that will be transported through FPUC's distribution systems.

The Transportation Administration Charge for ITS and LVTS will have a base cost of $150 for any quantities transported through FPUC. This base will cover any quantities from one therm through 15,000 therms per customer per month. Beyond that level, the ITS and LVTS Transportation Administration Charge increases by $0.0001 per therm per month.

Since the minimum for LVITS is 1,000,000 therms per month the minimum Transportation Administration Charge, computed mathematically using the above methodology, is proposed to be $248.50 for one therm through 1,000,000 therms. Any LVITS quantities above 1,000,000 therms will have a Transportation Administration Charge of $0.0001 per therm.

Q. Does that conclude your prepared direct testimony?

A. Yes.

DIRECT TESTIMONY
OF
CHARLES L. STEIN

IN

FLORIDA PUBLIC UTILITIES COMPANY
DOCKET NO. 900151-GU

IN RE: PETITION OF
FLORIDA PUBLIC UTILITIES COMPANY
FOR A RATE INCREASE IN THE
NATURAL GAS OPERATIONS

Q. Please state your name and business address.

A. Charles L. Stein. My business address is 401 South Dixie Highway, West Palm Beach, Florida 33401.

Q. By whom are you employed and in what capacity?

A. I am employed by Florida Public Utilities Company as the Manager - Gas Operations.

Q. Please briefly outline your educational qualifications and professional experience.

A. I received a Bachelor of Science degree in Civil Engineering from Rose Polytechnic Institute in 1971. I also received my M.B.A. with my major in Management from Xavier University in 1977.

I was employed by Cincinnati Gas and Electric Company (CG&E) upon my graduation in 1971 and worked there until February 1980 when I joined Florida Public Utilities Company as Distribution Superintendent.

While at CG&E I worked in the Engineering and Operating departments in various management capacities.

As Distribution Superintendent for Florida Public Utilities I was responsible for the Gas Operations of the West Palm Beach Division. I was promoted to Manager - Gas Operations in September 1986 and I am responsible for the Company's gas engineering and operations in the Palm Beach division and the Sanford and DeLand divisions.

Q. Have you previously testified before the Florida Public Service Commission?

A. No, I have not.

Q. What are the subject matters of your testimony in this proceeding?

A. My testimony will relate to three specific matters: First, the environmental issues; second, O & M Benchmark variance; third, Rate Design.

Q. Please explain why rate relief is being sought for the Environmental testing and remediation of old manufactured gas plant sites in the West Palm Beach and Sanford divisions.

A. The company became aware in 1989 that the Florida Department of Environmental Regulation had completed a Preliminary Assessment for the West Palm Beach site and forwarded this report to the EPA with a high priority for further investigation. As a result, the Company decided to retain legal counsel (Mr. William L. Pence with Akerman, Senterfitt, and Eidson, Orlando, Florida) and have a preliminary contamination assessment conducted of the West Palm Beach site to assess the potential environmental impact. Preliminary results indicate the need for additional testing and remediation.

The Company also learned the Sanford Manufactured Gas Plant Site was to have a Preliminary Assessment conducted by the Florida Department of Environmental Regulation in 1990 and our preliminary investigation indicates that this site will need further testing and remediation.

Q. How did you arrive at the environmental costs on Schedule G-2, Page 24, associated with the West Palm Beach and Sanford sites?

A. These cost estimates were based upon the initial findings of the Preliminary Contamination Assessment Report of our West Palm Beach Site, the costs incurred at other manufactured gas plant sites, and our legal counsel's experience. These cost estimates are preliminary based on known information and will change as additional information is obtained.

Q. Was the O & M Benchmark Variance Schedule C-38, Pages 1 and 2, prepared by you or under your direction?

A. Yes, they were.

Q. Were all benchmarks on Schedule C-38, Page 1, completed using the 1.23987 factor for the historic base year benchmark?

A. No, they were not.

Q. Please explain any that did not use this factor.

A. Line 7, O & M Labor Increases, used the CPI factor of 1.194 to establish the benchmark for the Company's O & M labor wage increase. Our negotiated labor wage increases with I.C.W.U. Local 428 and Local 36 resulted in a factor of 1.232. The Company's annual labor wage position which is the basis for negotiating our wage increases is determined by researching several publications' predictions for cost of living increases in the coming year and surveying other comparable utilities as to their plans for wage increases. The years 1985 and 1986 resulted in wage increases in excess of the CPI but the years 1987, 1988 and 1989 have resulted in wage increases that were less then the CPI for those years.

Q. Do you want to add any additional information for any other line items on Schedule C-38, Page 1?

A. The Company feels that restricting increases in expenses of certain O & M accounts to the increase in CPI and customer growth does not take into account actual experience. In our gas system we have experienced several areas where we have lost substantial numbers of customers from our system due to building removal without replacement, which reduced our net customer growth. This caused our total footage of mains to increase relative to [illegible]t customer growth due to the additional plant needed to serve new customers in other areas with very little retirement of plant in those areas of customer loss. In some cases entire areas of a town have been cleared of houses which were served with gas. The mains in these areas must remain active as they are still needed to maintain the integrity of our gas system. The operating and maintenance expenses for these mains and services have not been reduced by this decrease in customers and in many cases the O & M expenses have actually accelerated due to increased construction activity in those areas. The Company believes that when establishing benchmarks for these types of expenses, increases and decreases in plant per customer should be a factor.

Q. Turn now to the matters related to the allocation of the revenue increase to the various rate classes and the proposed tariffs. Were these prepared by you or under your direction?

A. Yes. Witness Marc Schneidermann carried out much of the detailed work but it was under my direction.

Q. Which MFR Schedules will you be referring to in your testimony?

A. Schedules E and H.

Q. What was the basis for allocating the Company's proposed revenue increases to the rate classes?

A. First, the results of the cost of service study in MFR Schedule H prepared by Witness Schneidermann under present rates were used as a guideline. Second, we had to apply judgement as to how much increase could practically be applied to each rate class since some rate classes were more deficient under present rates than others. It is the Company's position that it would not be proper at this time to fully attain equal rates of return for all classes since to do so would require a reduction in one rate class and steep increases in other classes. Rather we believe it more prudent to move in the direction of equalizing returns without decreasing revenues of any classes that are presently over unity.

Q. Please describe how and why the changes in revenue for each rate class were done.

A First I will refer to MFR Schedule H-1, page 274 which sets out a summary comparison of returns under present and proposed rates by rate class. For the Residential Class (RS) the rate of return (ROR) with present revenues is a negative 1.08%. We are proposing to move this class up to a 6.00% ROR which requires a 28.8% increase and nearly 60% of the total proposed revenue increase. We believe this is a reasonable approach at this time toward moving this class closer to a unity return index while at the same time trying to avoid the risk of losing customers. Next it is to be noted that the Genera. Service (GS) class has under present rates a return of 14.12%. We are proposing no change in the

GS rate. We don't think a decrease is necessary and if one were made it would necessitate a greater increase to other classes. With respect to the Large Volume Service (LVS) class I will describe our proposed change after I have been through the other classes. For the Public Housing Authority Service (PHAS) class the present rates show a ROR of a negative 12.52%. To move the PHAS class up to say a ROR equivalent to the RS class proposal of 6.0% would require a revenue increase of approximately 160%. Therefore, we are proposing an increase to attain a 0.0% return. This requires an increase of $77,427 in revenues or 118%. We recognize this is a large increase but we feel that it is necessary if we are to work toward a ROR for the PHAS class that is more in line with the RS class. In the past the Commission has expressed concern as to this special but relatively small rate class and stated that it should be the same as the RS class. We believe the movement from a negative return of 12.5% to 0.0% is a transitional step at this time toward equivalency to the RS class. Turning now to the two interruptible rate classes (IS and LVIS) we are proposing increases to bring the RORs up to 9.05% or an ROR index of 1.00. We consider it reasonable to have these classes at that level. The ROR of the IS class under present rates is 2.6[illegible] and that of the LVIS class is a negative 1.26%. The proposed revenue increases are $68,235

(50.15%) and $144,274 (84.167%) for the IS and LVIS classes, respectively. While the percentage increases appear relatively high the dollar amounts are less significant. In our opinion, these increases should not impair the ability of the Company to compete with alternate fuels since their current rates are relatively low. As can be seen in MFR Schedule E-5 (pages 239 and 240) the increase after fuel costs are included are approximately 6 to 8% for the IS class and less than 2.5% for the LVIS class. It should be noted that the present interruptible rates have not been increased for a number of years.

Q. Now please describe the proposed increase to the Large Volume Service (LVS) rate class.

A. The ROR under present rates of the LVS class is 7.83%. We are proposing to raise that ROR to 11.55% or a return index of 1.28. This results in a revenue increase of nearly $520,000 or 16.7%. We consider it reasonable for this rate class to have a return slightly above unity on the basis of value of service to this class of customers which use gas for industrial and large commercial purposes on a firm basis. The revenue increase to the LVS class completes the total allocation of the proposed increase.

Q. Please summarize the Company's approach with respect to allocating the total revenue increase.

A. We have attempted to spread the increase in a reasonable manner so that each class' return index is closer to unity than it is under present rates. We also have considered the relative competitive position of gas rates because too great an increase on a class might cause customers to switch to other energy sources. Since natural gas is a fuel of choice and not one of absolutely necessity to a customer or prospective customer, the Company needs to take care to avoid possibly pricing itself out of the market.

Q. After the proposed increases were allocated as you have just described how did you go about setting the prices needed in your tariffs to achieve those revenues?

A. The first step is to deduct from the total revenue requirements of each class the other operating revenues that are to be derived from service charges, rents, sales tax commission and other miscellaneous sources. The Company is proposing to increase its service charges for connections, reconnects, change of account, etc. A study was made of the costs to perform each of those activities. The details of costs for those activities are set out in MFR Schedule E-3, pages 227-232. Revised service charges were then derived by setting the proposed charges close to those costs rounded to the nearest dollar. A comparison of the present and proposed service charges and the revenues therefrom as well as revenues from ot[illegible] sources is summarized at the bottom of MFR Schedule H-1, page 273. Those other revenues were then allocated to the rate classes generally based on the number of average customers. The computation of required revenues from the sales tariffs is set forth at the top of that same page 1A of MFR Schedule H-1 under the line "Less: Other Operating Revenue."

Q. Please proceed with how the sales tariff customer charges and non-fuel energy charges were developed.

A. The next step is to determine the proper customer charge for each rate class. The cost of service study computes unit costs and those customers costs were used as a guide for setting customer charges. MFR Schedule H-1, page 280 sets out those customer costs by rate class. For the RS class we are proposing to increase the charge from $6.00 to $8.00. While the cost study shows those costs for the RS class to be $12.46 it would not, in our opinion, be prudent to set that charge at cost. Not only would such a charge cause an excessive increase to small users, but it would over time cause the loss of existing one-gas appliance residential customers and possibly drive away prospective new customers. In our opinion it would be very difficult to hold customers and attract new ones if there were a charge of say $12.00 before the customer used a therm of gas. We are proposing to increase customer charges of all other classes in recognition of the st study's unit costs but not in all cases up to the unit cost for the reasons just described.

Those proposed customer charges are also given on MFR Schedule H-1, page 273.

The proposed PHAS customer charge has been set at $8.00, the same as proposed for the RS class. This is being done as a part of the transition process to raise the PHAS rate nearer to the RS rate.

Q. How were the non-fuel energy charges determined?

A. Once the customer charges are set and the revenue therefrom computed the energy charges are set to recover the remaining required revenues based on the projected therm sales. MFR Schedule H-1, page 273, shows the derivation of those charges and compares them with the existing rates. The proposed non-fuel energy charge for the GS class shows a decrease of approximately 2.0 cents per therm even though no revenue increase from this class is proposed. That is because the customer charge has been increased from $6.00 to $10.00 and therefore less revenue is needed from the energy charge.

Q. It is noted that the Company proposes to withdraw its existing unmetered outdoor lighting rate (OLS) as shown on MFR Schedule E-9, page 253. Why is that rate schedule being withdrawn?

A. In the company's last gas rate case in Docket No. 850172-GU, Order No. 16195, t[illegible] Commission ordered that this rate schedule be eliminated on or before the Company's next rate compliance with that order we have eliminated the

that unmetered rate. Therefore, the rate schedule

withdrawn.

conclude your direct testimony?

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

DOCKET NO. 900151-GU

DIRECT TESTIMONY

OF

ROBERT S. JACKSON

MAY 1990

FLORIDA PUBLIC UTILITIES COMPANY

DIRECT TESTIMONY OF ROBERT S. JACKSON

Q. Please state your name and business address.

A. Robert S. Jackson. My business address is One Penn Plaza, New York, New York.

Q. By whom are you employed?

A. I am a Senior Vice President of Stone & Webster Management Consultants, Inc.

Q. Please explain briefly the nature of the financial advisory services provided by Stone & Webster Management Consultants, Inc.

A. Stone & Webster has been active in the engineering, financing and consulting aspects of the energy industry since 1889. The financial advisory services which are provided include assistance in the sales of both debt and equity; advice as to the amount, timing and types of securities to be sold; rate case assistance in all areas, including financial, operating, rate of return and rate design; long- and short-range projections of future revenues, expenses and capital requirements; and the valuation of properties for purposes of rate making, corporate realignments, and the determination of tax basis. Some of the other areas in which Stone & Webster has expertise and which often overlap the financial and accounting areas are tax, insurance, depreciation and operations of gas, electric, water and steam utilities throughout the United States and in many other countries. In order to provide its corporate clients with financial advice, Stone & Webster is often called upon to make detailed studies of historical records and to make estimates for the future. The preparation of studies of this nature requires the compilation of vast amounts of statistical data for both the company being analyzed and for other companies in that industry. This information, together with our years of experience in the utility field, provides the basis for the financial and other advisory services performed by Stone & Webster Management Consultants, Inc. Appendix A attached contains my curriculum vitae.

Q. What were you asked to do for these hearings?

A. I was asked to prepare an analysis of the current cost of common equity capital of Florida Public Utilities Company ("Florida Public" or "the Company") and to summarize that analysis as an exhibit for presentation to the Commission in this gas division rate increase application.

Q. Have you prepared an exhibit in connection with the testimony being presented?

A. Yes. I have prepared an exhibit which consists of six schedules and five appendices and has been designated as _____.

Q. How did you approach the determination of the current cost of equity capital to the Company?

A. I first made a comparable earnings study of Florida Public and of a group of gas distribution utilities that are reasonably comparable to Florida Public. Next, I did a discounted cash flow (DCF) analysis of each member of the group and of the Company. I also performed a risk premium analysis and tested the indicated coverage of interest charges.

Q. What is your conclusion as to the current cost of equity to Florida Public?

A. I have concluded that the current cost of equity to the Company is fairly stated at 13.85 percent based on its permanent capital structure for the year ending December 31, 1989. That capital structure consists of 57 percent long-term debt, 2 percent preferred stock and 41 percent common stock equity.

Q. What were the overall parameters within which you made this study of cost of capital?

A. In making this study of cost of capital and fair rate of return, my overall objective has been to satisfy the fundamental requirement of a just and reasonable return for Florida Public, guided by my understanding of the legal standards as stated, for example, by the United States Supreme Court in the Hope and Bluefield decisions, i.e., a return which will maintain a company's financial integrity, enable it to maintain the ability to attract capital and compensate its investors for the risks assumed. First, in Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679 (1923), the Court made the following statement:

> "A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in he

> same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economic management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties."

This decision was amplified in the Hope case (FPC v. the Hope Natural Gas Co., 320 U.S. 591, 603 (1944):

> "...The return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. The return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital."

The geographical restriction on the comparability of companies in the 1923 Bluefield decision ("...return...generally being made...in the same general part of the country...") was omitted in the 1944 Hope decision, thus broadening Bluefield as Bluefield had broadened the "locality" bound 1909 <u>Willcox</u> decision (<u>Willcox v. Consolidated Gas Co.</u>, 212 U. S. 19 [1909]).

Q. Please define the comparable earnings methodology.

A. The comparable earnings methodology stems from the decision of the United States Supreme Court in the <u>Hope Natural Gas</u> case, 320 U.S. 603. The Court held that the investor "... has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view, it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard, the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital." The quoted sentences seemed to provide two standards for determining a fair rate of return. The first is the "comparable earnings" standard--a return commensurate with returns on other investments attended by corresponding risks. The second is the "capital attraction" standard--that the return to a company must be sufficient to attract capital to the enterprise. When viewed theoretically, these two standards have much in common. They both recognize that if the investor does not earn a rate of return comparable to that which he could earn elsewhere at the same risk, he will take his capital elsewhere, and the company will fail to attract capital on reasonable terms.

Q. Please describe the first step in your comparable earnings analysis.

A. The first stage of the study was to examine the financial results of Florida Public over the recent past in order to test its debt quality rating. The Company's bonds are not currently rated. Its common stock is traded over the counter. Schedule 1 shows several key financial barometers for the fiscal years 1988 and 1989. Also shown on Schedule 1 (lines 13-16) are S&P's revised gas company benchmarks from its February 3, 1989 edition of Energy Ratings Update. Based on the S&P benchmarks the Company's bonds are of low "BBB" quality.

Q. Please explain the application of the S&P criteria to the Company's financial results.

A. I will discuss each of the benchmarks in turn. First, pretax interest coverage is defined as net income from continuing operations adjusted for non-recurring items (before taxes), less the equity portion of allowance for funds used during construction (AFDC), plus minority interest, income taxes, and interest expense, all divided by interest incurred. Interest capitalized, including the debt portion of AFDC, is excluded from interest expense but included in interest incurred. The coverage for Florida Public was 1.9 times in 1988 and 1989. The benchmark for a "BBB" rating is from 2.0 times to 3.25 times.

The next test is the relationship of total debt to total capital. Total debt is defined as the sum of notes payable and other short term obligations (including current maturities of long term debt and capital lease obligations), plus long term debt (including long-term debt equivalents such as capital lease obligations). All seasonal short term borrowings are excluded. Total capital represents the sum of total debt, preferred stock (including subsidiary preferred), minority interest, and common equity. Total capital does not include deferred income taxes or deferred investment tax credits. The debt ratio for the Company in 1988 was 60 percent and in 1989 was 62 percent. The "BBB" benchmark is from 50 percent to 65 percent.

The third test is the relationship of operating cash flow to average total debt capital. Operating cash flow is that from operations after working capital changes. The relationship for the Company was 22 percent in 1988 and 15 percent in 1989. The standard for "BBB" is 15 percent to 30 percent.

The final test is the relationship of operating cash flow before interest incurred to interest incurred. That coverage for the Company was 3.0 times in 1988 and 2.5 times in 1989 which is within the "BBB" range of 2.0 times to 3.5 times.

The results for Florida Public Utilities translate to a quality rating of a low "BBB" by these tests. On that basis, I conclude that the bonds of the Company have a current quality rating of "BBB".

Q. Of what significance is an indicated bond rating to Florida Public?

A. The top four quality ratings (AAA, AA, A and BBB) are referred to as the investment grade ratings. Many banks are restricted to investment in the investment gr[illegible] securities. To drop below this range could materially reduce the sources of funds generally available to a company. With a "BBB" rating, the Company is on the last step of the investment grade securities.

Q. How was the selection of comparison companies made?

A. Edward D. Jones & Co. publishes a monthly report entitled, "Financial and Common Stock Information, Natural Gas Industry" which lists 38 gas distribution utilities. This group of companies ranges in size from Brooklyn Union with $1.1 billion of total capital to Corning Natural Gas with $11 million of total capital. The Company had approximately $35 million of total capital at the end of 1989, and I selected a group most similar in size to the Company. The comparison group of companies ranges in size from Chesapeake Utilities ($57 million of total capital) to Wisconsin Southern Gas ($20 million). This group of small (average $38 million of total capital) gas distributors provides a benchmark group against which to measure and determine the current cost of equity capital to Florida Public Utilities.

There is no other company which is precisely identical with Florida Public. The comparison group range in size as measured by total capital investment from one and one-half as large as Florida Public to one-half as large. As noted earlier the other distributors are materially larger or smaller. The comparison group also provides a diversity of geographical mix from the midwest, southeast and New England regions. An investor, of course, has the option of choosing an investment without regard to geography. Since the Company competes for funds with all other companies, it is important that the list include a representative sampling, in my opinion.

The seven comparison companies are listed on Appendix B.

Q. How does this group of companies compare with the Company?

A. A financial comparison of Florida Public and the group is presented in Schedule 2. As shown on page 1 of that Schedule, the common equity ratios of Florida Public have been generally below the average for the group over the past six years. The 1984-88 average common equity ratio of the Company was 50 percent as compared with an average of 53 percent for the group. The current equity ratio for the Company is 41 percent and for the group averages 47 percent.

Schedule 2, page 2 shows that the return earned on common equity throughout the 1984-88 period was significantly lower for the Company (9.9 percent) than for the group (15.8 percent). Results for 1989 show Florida Public reporting a current return of 12.1 percent as opposed to a 12.6 percent average return for the group.

Schedule 2, page 3 shows that the market/book ratio increased by 118 percent for Florida Public, from 0.78 in 1984 to 1.71 in 1988. This compares with an increase of 46 percent over the same period for the comparison group on average (from 1.19 in 1984 to 1.74 in 1988). The 1989 average ratio increased over 1988 for five of the seven comparison companies, but declined for the Company. The average 1989 ratio for the group is 1.85 and for the Company is 1.54.

The book yield for each of the comparison companies and Florida Public is shown on page 4 of Schedule 2. This is the relationship between dividend paid and book value per share. There has been a very steady relationship in average book yield for the group within the narrow range of from 9.5 percent to 10.2 percent during the 1984-89 period. This may be compared with the range of from 6.1 percent to 7.3 percent for the Company during the same period.

Q. Please summarize your conclusion on the comparable earnings analysis.

A. Earned return on book value is an indicator of the ability of a utility company to earn its authorized rate of return. During the five years ended 1988, the comparison companies earned a median return on common equity of 14.36 percent. Florida Public earned an average return of only 9.92 percent over the same time period. The median common equity ratio to total capital was 53 percent for the group and 50 percent for the Company during 1984-88. The 1989 ratio for the group (44 percent) remains three points higher than that of the Company (41 percent). The relationship of dividends to book value for the Company averaged 6.9 percent over the 1984-89 period as compared with a median of 9.3 percent for the comparison group over the same period. Finally, the dramatic increase in market/book ratio for the Company as well as for each company comprising the group was shown for the 1984-89 period. A median ratio for the group of 1.10 in 1984 may be contrasted with 1.49 in 1989. This represents an increase of more than 35 percent. For the Company, the difference is even higher--from a market/book ratio of 0.78 in 1984 to 1.54 in 1989. This is nearly a doubling over that five-year time period. As I will testify later, the magnitude of these changes unaccompanied by commensurate changes in per share earnings, dividends or book values, renders market-based tests of common equity of limited usefulness in these proceedings.

Q. Please describe the second analysis that you used, the DCF methodology.

A. The DCF method of estimating investor return requirements is derived from the dividend growth model. This theory of valuation posits that the market price of a share of common stock is equal to the present value of its future dividends. These dividends are assumed to grow at a constant rate, and the discount rate represents the minimum return required by investors allowing for the risk of the particular security.

Essentially, then, the DCF model recognizes that the return to an investor consists of two parts--dividend yield and market value growth. Investors expect to receive a portion of their return in the form of current dividends and the remainder through market price appreciation. Since current market price indicates what investors think a share of common stock in a given company is worth, the rate of return required by investors can be imputed by estimating their expectations of future dividend growth. The simple DCF model is of ten expressed as follows:

$$k = (D/P) + g$$

where: k = the discount rate

D = current dividend

P = current market price

g = estimated growth rate

The DCF model maintains that the emphasis is on the long-term growth rate in dividends per share and not on the short-term. The analysis, therefore, normally attempts to determine what investors anticipate long-term growth will be. A number of growth tests have been utilized in this study. Per-share dividends, earnings, and book values have been analyzed for the period 1984 through 1989. Schedule 3 shows per share data for each of the comparison companies for the 1984-1989 period. Compound annual rates of growth have been calculated over this entire period for each series for each of the companies.

In order to more accurately reflect the growth rates, least-squares growth procedures have been used rather than point-to-point. The latter methodology gives no weight to interim results; the least-squares method, on the other hand, properly recognizes the reported results for each of the intervening years.

A business enterprise may do one of two things with the profits it earns. It can pay them out in the form of dividends to its owners, or it can retain and reinvest them in the business. The latter option is referred to as "internal growth." One way of calculating internal growth is to examine the returns earned on equity and the concurrent payout ratios. The amount retained in the business is equal to the amount earned less the amount paid out in the form of dividends, i.e., one minus the payout ratio. For example, a company which earns a return on equity of 15 percent which pays out 60 percent in the form of dividends has an indicated internal growth rate of 6 percent (15 percent x 40 percent percent). In this study, the earned returns over the 1984 through 1989 period and the payout ratios over the same period were averaged, and a growth rate from internal sources was calculated. Please refer to Schedule 4, page 2, column 4.

The DCF cost rate for each company represents the sum of the adjusted yield and the growth rate.

Q. Please discuss the DCF study which is summarized on Schedule 4 of your exhibit.

A. Schedule 4 consists of three pages. Page 1 shows for each of the comparison companies the current annual dividend, the average of the closing monthly market prices during the 12 months ended March 1990 and the resulting current yield on common stock.

Page 2 of Schedule 4 shows several growth rate tests for each member of the group. I analyzed historic growth rates in per-share earnings, dividends, and book value for each utility. The dividend and book value growth rates were used and are shown in the first two columns for the 1984-1989 period. Least-squares-growth rates were calculated in which each of the intervening year's data are reflected. Column 1 shows dividend per share growth rates and column 2 shows book value per share growth rates.

The growth rates shown in column 3 represent the current (1990 over 1989) annual rate of dividends. Details of this calculation are shown in Appendix D.

In addition to the dividend and book value growth rates just discussed, the retention growth was calculated based on the average retention for the last six years (1984 through 1989). These growth rates are shown in Column 4. (See Appendix E for detail.)

Q. Please continue with your explanation of DCF growth.

A. Per-share earnings are subject to a host of influences, such as weather patterns, rate decisions, accounting changes, extraordinary write-offs or gains, etc. For this reason, it is typical to discover wide ranges in the pattern of per-share earnings for any company. This was true for the companies in this analysis. The annual per share earnings growth rates varied widely from -48 percent to 97 percent for the companies within the comparison group during the time periods studied. Because of the uncertainties demonstrated and the wide fluctuations experienced, per share earnings history was not used in the development of a DCF growth estimate.

The growth rate used in the DCF study is shown in Schedule 4, page 2, column 5 and represents the average of the four growth rates previously discussed (with half-weight being accorded to the current dividend growth rate and full weights assigned to each of the other three growth rates).

Q. What is the DCF cost rate which is produced by your study?

A. Schedule 4, page 3 shows the calculated DCF cost rate for the group. The growth and yield components in the first two columns were taken from pages 1 and 2 of Schedule 4. The classic formula of growth plus yield is designed to produce parity between market price and book value (DCF1). As noted earlier, there has been a significant increase in the relationship of market price and book value for utility common stocks since 1984. In order to reflect market parity rather than book parity, columns 5, 6 and 7 have been added to page 3. In column 5 the 1989 market/book ratio is shown. The current yield in column 2 is multiplied by the market/book ratio in column 5 to produce the adjusted yield in column 6. The sum of columns 1 and 6 is labeled DCF2 and shown in column 7. The median cost for the group is shown at 13.93 percent.

Q. What is the DCF2 cost rate calculated in a similar manner for Florida Public?

A. The DCF2 cost rate for the Company is shown at 11.12 percent.

Q. Do you believe that the DCF methodology produces a current cost rate which can be exclusively relied upon in fixing the cost of common equity capital?

A. No, I do not. The market price for utility common stocks as measured by the year-end Dow Jones Utility Index has changed radically during the past decade:

	DJUI	Change
1981	109.02	-
1982	119.46	9.6%
1983	131.84	10.4%
1984	146.80	11.3%
1985	174.81	19.1%
1986	206.01	17.8%
1987	175.08	-15.0%
1988	186.28	6.4%
1989	235.04	26.2%

Thus the index has increased by 116 percent from 1981 to 1989, a compound growth rate of 10.1 percent. This rate of increase has not been accompanied by similar rises in dividends paid, in returns earned, in financial coverages, or in any of the commonly used measures of financial health and strength by the companies which comprise the industry. To the extent that the DCF methodology is used, therefore, it must be viewed in this context of fluctuating market prices and overall market uncertainty.

Q. Please describe the risk premium method.

A. Rational investors will expose themselves to higher risk only if they anticipate receiving higher returns. In general, the level of risk is associated with the degree of uncertainty. Some investments are considered "risk-free." These are U. S. Government notes, bonds, Treasury bills, etc. Business and financial risks do not impact these securities since the Government can literally create money to pay its obligations. For all other investments, however, business and financial risks are integral elements of their cost.

If the cost of capital can be described as a risk-free rate plus a risk premium, the problem then becomes one of measuring each of the elements.

The risk-free rate is measured using the average current rate on long-term U.S. Government bonds (8.90 percent). The risk premium may be estimated from the long-term analysis of Ibbotson which created a series of indices of cumulative wealth as a result of tracking investments in common stocks and U.S. Government bonds among others.

The study shows that $1.00 invested in common stocks in 1925 would have grown to $534.45 by 1989. The average annual arithmetic growth rate over this entire 63-year period was 12.39 percent. The comparable index for U.S. Government bonds grew at an average annual rate of 4.88 percent. Thus, the risk premium associated with common stock investment may be inferred as the difference between the two rates or 7.51 percent. Beta is a measure of the sensitivity of an individual stock price to the overall fluctuation in market price and is a measure of volatility or risk. A beta of 1.5, for example, indicates that a stock tends to rise (or fall) 50 percent more than the market in general. The market, by definition, has a beta of 1.0. Individual stocks have a wide variety of betas ranging from less than 0.5 to more than 2.5. A beta of 0.70--the approximate average of the gas distribution industry--has been used in this analysis.

With each of the elements of cost in place, it is possible to calculate a cost using the capital asset price method. The calculation produces an indicated current equity cost rate of 14.16 percent.

Details of the common equity cost rate using risk premium methodology are contained in Schedule 5.

Q. Please summarize your conclusion as to current cost of common equity to Florida Public Utilities.

A. The studies about which I have testified may be summarized as follows:

Comparable Earnings:

Florida Public Utilities	9.92%
Comparison Group	14.36%

Discounted Cash Flow:

Florida Public Utilities	11.12%
Comparison Group	13.93%

Risk Premium	14.16%

Traditional DCF:

Florida Public Utilities	8.97%
Comparison Group	11.08%

During the 1984 through 1988 period, Florida Public earned an average return on common equity of only 9.92 percent. The group of comparison companies earned a median return of 14.36 percent over the same period. (In 1989 the Company earned 12.1 percent, compared with the 13.4 percent median for the group.) My analysis showed that the comparison group was reasonably close to Florida Public by several financial measures. Their earned returns are, therefore, one useful indicator of the current cost of equity.

The DCF studies based on adjusted yield produced a median cost rate of 13.93 percent for the group. This cost rate gives recognition to the fact that current market price is significantly above book value and has been so for several years. The DCF cost for Florida Public was 11.12 percent.

Risk premium studies are premised on the assumption that the risk associated with an ownership investment, such as utility common stock, has more risk than an investment in a fixed income security. My analysis produced an indicated current cost of common equity of 14.16 percent.

The "traditional" DCF study, in which a growth-adjusted yield is combined with current yield with no adjustment for market/book ratios, produces a median cost rate of 11.08 percent for the group and 8.97 percent for Florida Public. These results highlight the difficulty in measuring the cost of common equity solely through traditional DCF analyses. In order to accept these indicated cost rates of risk capital, one would have to believe that equity capital for the Company has a current cost rate approximately 115 basis points less than that of Baa-rated utility debt. These DCF1 results were given no weight in my determination of current equity cost for use in these proceedings.

The recent historical returns earned on common equity by the Company are well below authorized levels. In addition, the DCF study showed Florida Public's yield and growth rates to be below the average of the comparison group. As a result its cost indicators are far below those of the industry. In order to minimize these atypical results, therefore, I first determined the median cost rate for all of the analyses to be 13.93 percent. I next calculated a weighted rate for earned returns and f [illegible] the DCF cost rate. The median earned return previously discussed for the group (14.36 percent) was weighted by the number of companies comprising the group (seven) and combined with the earned return of Florida Public (9.92 percent) producing a weighted earned return of 13.81 percent. Similarly, the median DCF2 cost rate for the group (13.93 percent) was given a weight of seven, combined with the DCF2 cost rate for the Company (11.12 percent) producing a weighted DCF2 cost rate of 13.58 percent. The average of these two weighted cost rates and the risk premium cost rate of 14.16 percent is 13.85 percent. The latter rate was adopted as the current cost of equity for Florida Public Utilities.

Q. What is the overall rate of return produced by your recommended return on equity of 13.85 percent?

A. Schedule 6 of my exhibit shows the overall cost of capital based on permanent capitalization at December 31, 1989. Details of the capital structure were provided by the Company. The overall rate of return using an embedded cost of long-term debt capital of 9.78 percent, of preferred stock of 4.75 percent and the current cost of common equity capital of 13.85 percent is shown at 11.38 percent. This cost rate is applicable to the accumulated deferred innvestment tax credits (4 percent and 10 percent) in this proceeding. The indicated pre-tax coverage of interest charges at this cost rate is 2.7 times. This coverage is consistent with a "BBB" quality rating based on the S&P financial benchmarks previously discussed.

Q. Does this complete your direct testimony?

A. Yes, it does.

EXHIBIT________

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

DOCKET NO. 900151-GU

TO ACCOMPANY THE DIRECT TESTIMONY

OF

ROBERT S. JACKSON

MAY 1990

Schedule 1

FLORIDA PUBLIC UTILITIES COMPANY

STANDARD & POOR'S FINANCIAL TESTS

(000's)

Line		Dec/87	Dec/88	Dec/89
1	Net Cash from Operations	$4,108	$4,100	$3,271
2		======	======	======
3	Long-term Debt	$10,153	$19,806	$19,656
4	Notes Payable	6,200	382	4,100
5	Current Maturities	616	847	150
6		------	------	------
7	Total Debt	16,969	21,035	23,906
8	Preferred Stock	606	600	600
9	Common Equity	14,852	13,375	14,215
10		------	------	------
11	Total Capital	$32,427	$35,010	$38,721
12		======	======	======
13	Net Income (1)	$1,412	$1,196	$1,311
14	Add--Interest Expense	1,584	2,066	2,206
15	--Income Taxes	863	647	727
16		------	------	------
17	Total	$3,859	$3,909	$4,244
18		======	======	======
19	Interest Incurred	$1,584	$2,066	$2,[illegible]06
20		======	======	======
21	(1) Before change in accounting method in 1989			

		Dec/88	Dec/89	Line
Pretax Interest Coverage:				1
(Line17/Line19) (times)		1.89	1.92	2
Total Debt/Total Capital:				3
(Line7/Line11)		60%	62%	4
Op Cash Flow/Avg Tot Debt:				5
(Line1/AvgLine7)		22%	15%	6
Op Cash Flow Int Coverage:				7
(Line1+19/Line19) (times)		2.98	2.48	8
				9
S&P Benchmarks:	AA	A	BBB	10
--------------	-----	-----	-----	11
Pretax Int (x)	>4.0	3.0-4.25	2.0-3.25	12
Tot Debt/Cap (%)	<45	45-55	50-65	13
Op Cash/Debt (%)	>35	25-40	15-30	14
Cash Flow/Int (x)	>4.5	3.25-4.75	2.0-3.5	15
				16
S&P Energy Update (2/3/89)				17
for Gas Distributors				18
				19
Indicated Rating: BBB-				20
				21

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

COMMON EQUITY RATIO

		1984	1985	1986	1987	1988	Avg 1984-88	1989
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Chesapeake Utilities	80%	66%	61%	63%	41%	62%	55%
2	Delta Natural Gas	32%	51%	48%	38%	37%	41%	41%
3	Essex County Gas	40%	42%	45%	40%	40%	41%	38%
4	Fall River Gas	59%	58%	63%	56%	54%	58%	44%
5	Mobile Gas Service	64%	65%	58%	63%	67%	63%	54%
6	Roanoke Gas	52%	55%	59%	51%	49%	53%	40%
7	Wisconsin Southern Gas	44%	50%	50%	52%	55%	50%	58%
8								
9	Average	53%	55%	55%	52%	49%	53%	47%
10	Median	52%	55%	58%	52%	49%	53%	44%
11								
12	Florida Public Utilities	49%	51%	53%	58%	40%	50%	41%
13								

14 Note: Data for 1989 from March 1990 EDJones

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

RETURN ON AVERAGE COMMON EQUITY

		1984	1985	1986	1987	1988	Avg 1984-88	1989
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Chesapeake Utilities	20.5%	18.0%	14.7%	18.4%	14.1%	17.1%	7.6%
2	Delta Natural Gas	16.1%	12.6%	12.5%	12.7%	14.3%	13.6%	8.8%
3	Essex County Gas	15.0%	14.0%	12.7%	12.3%	13.6%	13.5%	13.4%
4	Fall River Gas	20.4%	19.8%	19.6%	19.0%	18.1%	19.4%	15.7%
5	Mobile Gas Service	16.6%	11.8%	10.0%	14.4%	16.9%	13.9%	13.5%
6	Roanoke Gas	21.3%	10.4%	13.6%	9.2%	17.3%	14.4%	12.6%
7	Wisconsin Southern Gas	21.8%	22.5%	13.0%	15.6%	19.3%	18.4%	16.6%
8								
9	Average	18.8%	15.6%	13.7%	14.5%	16.2%	15.8%	12.6%
10	Median	20.4%	14.0%	13.0%	14.4%	16.9%	14.4%	13.4%
11								
12	Florida Public Utilities	12.7%	8.5%	10.3%	9.8%	8.3%	9.9%	12.1%
13								

14 Note: 1989 Data from March 1990 EDJones

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

AVERAGE MARKET/BOOK RATIO

		1984	1985	1986	1987	1988	Incr 1984-88	1989
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Chesapeake Utilities	1.41	1.57	1.87	1.97	1.88	32.9%	1.54
2	Delta Natural Gas	1.16	1.23	1.43	1.43	1.43	23.2%	1.49
3	Essex County Gas	0.93	1.07	1.29	1.27	1.21	30.5%	1.23
4	Fall River Gas	1.10	1.26	1.40	1.77	2.36	114.2%	2.91
5	Mobile Gas Service	1.04	1.20	1.52	1.63	1.72	65.7%	1.76
6	Roanoke Gas	0.87	1.03	1.28	1.51	1.51	73.9%	1.41
7	Wisconsin Southern Gas	1.84	1.84	2.24	1.90	2.10	14.5%	2.59
8								
9	Average	1.19	1.31	1.57	1.64	1.74	46.3%	1.85
10	Median	1.10	1.23	1.43	1.63	1.72	32.9%	1.49
11								
12	Florida Public Utilities	0.78	0.85	1.16	1.60	1.71	117.8%	1.54
13								

14 Note: Data for 1989 are averages for months of Jan-Dec (EDJones)

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

BOOK YIELD

		1984	1985	1986	1987	1988	1989	Avg 1984-89
		(1)	(2)	(3)	(4)	(5)	(5)	(6)
1	Chesapeake Utilities	9.5%	10.1%	10.3%	9.8%	10.4%	9.1%	9.9%
2	Delta Natural Gas	11.1%	12.0%	11.9%	11.8%	11.4%	11.8%	11.7%
3	Essex County Gas	9.5%	9.8%	9.2%	8.6%	9.1%	9.0%	9.2%
4	Fall River Gas	11.6%	12.0%	12.1%	12.2%	12.3%	13.1%	12.2%
5	Mobile Gas Service	8.3%	8.6%	8.8%	8.8%	8.4%	8.5%	8.6%
6	Roanoke Gas	7.6%	8.2%	9.5%	9.4%	8.8%	8.9%	8.7%
7	Wisconsin Southern Gas	9.2%	9.3%	9.8%	9.4%	9.2%	8.9%	9.3%
8								
9	Average	9.5%	10.0%	10.2%	10.0%	9.9%	9.9%	9.9%
10	Median	9.5%	9.8%	9.8%	9.4%	9.2%	8.9%	9.3%
11								
12	Florida Public Utilities	6.1%	7.0%	6.9%	6.8%	7.3%	7.3%	6.9%
13								
14	Note: Common dividend/book value per share							

Schedule 3

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

PER SHARE DATA

	1984	1985	1986	1987	1988	1989
	(1)	(2)	(3)	(4)	(5)	(6)
Dividends Per Share:						
Chesapeake Utilities	$0.62	$0.71	$0.76	$0.78	$0.82	$0.83
Delta Natural Gas	$1.00	$1.04	$1.04	$1.04	$1.04	$1.08
Essex County Gas	$1.08	$1.16	$1.16	$1.16	$1.19	$1.24
Fall River Gas	$1.23	$1.38	$1.49	$1.60	$1.70	$1.84
Mobile Gas Service	$0.61	$0.65	$0.67	$0.71	$0.74	$0.80
Roanoke Gas	$1.56	$1.75	$1.80	$1.88	$1.91	$2.00
Wisconsin Southern Gas	$0.75	$0.87	$0.95	$0.98	$1.06	$1.10
Florida Public Utilities	$0.67	$0.80	$0.83	$0.88	$0.92	$0.96
Book Value Per Share:						
Chesapeake Utilities	$6.55	$7.06	$7.36	$7.98	$7.88	$9.10
Delta Natural Gas	$8.97	$8.69	$8.75	$8.85	$9.11	$9.18
Essex County Gas	$11.31	$11.83	$12.57	$13.51	$13.10	$13.72
Fall River Gas	$10.64	$11.45	$12.28	$13.09	$13.82	$14.03
Mobile Gas Service	$7.31	$7.53	$7.63	$8.07	$8.77	$9.41
Roanoke Gas	$20.65	$21.35	$18.98	$20.02	$21.72	$22.51
Wisconsin Southern Gas	$8.18	$9.38	$9.71	$10.40	$11.55	$12.37
Florida Public Utilities	$11.01	$11.51	$12.05	$12.96	$12.54	$13.21
Earnings Per Share:						
Chesapeake Utilities	$1.28	$1.22	$1.06	$1.41	$1.07	$1.10
Delta Natural Gas	$1.41	$1.01	$1.09	$1.11	$1.29	$1.07
Essex County Gas	$1.65	$1.63	$1.61	$1.56	$1.80	$1.94
Fall River Gas	$2.09	$2.18	$2.32	$2.40	$2.43	$2.25
Mobile Gas Service	$1.17	$0.87	$0.75	$1.13	$1.42	$1.22
Roanoke Gas	$4.13	$2.14	$1.67	$1.83	$3.61	$2.25
Wisconsin Southern Gas	$1.67	$1.98	$1.18	$1.57	$2.11	$2.12
Florida Public Utilities	$1.47	$1.04	$1.31	$1.31	$1.09	$1.20

Note: Data for the comparison group for 1989 from S&P Stock Guide (3/90) EPS, DPS and EDJones Financial Information (3/90) BPS

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

CURRENT YIELD

		Ann Div	Avg Mkt	Yield
		(1)	(2)	(3)
1	Chesapeake Utilities	$0.84	$13.16	6.38%
2	Delta Natural Gas	$1.08	$14.04	7.69%
3	Essex County Gas	$1.32	$17.83	7.40%
4	Fall River Gas	$1.84	$36.89	4.99%
5	Mobile Gas Service	$0.80	$16.11	4.96%
6	Roanoke Gas	$2.00	$33.33	6.00%
7	Wisconsin Southern Gas	$1.18	$32.32	3.65%
8				
9	Florida Public Utilities	$1.00	$23.14	4.32%

10
11 (1) Current annual dividend rate (3/90)
12 (2) Average market, Apr 89 to Mar 90 (See Appendix C)
13 (3) Current yield, (1)/(2)

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

DCF GROWTH SUMMARY

		DPS	BPS	DPSC	RETEN	WTD AVG
		(1)	(2)	(3)	(4)	(5)
1	Chesapeake Utilities	5.63%	6.05%	1.61%	6.33%	5.38%
2	Delta Natural Gas	1.11%	0.70%	0.00%	2.21%	1.15%
3	Essex County Gas	2.22%	3.91%	6.45%	4.23%	3.88%
4	Fall River Gas	8.05%	5.91%	0.00%	6.34%	5.80%
5	Mobile Gas Service	5.29%	5.21%	5.26%	5.04%	5.19%
6	Roanoke Gas	4.52%	1.54%	0.00%	6.22%	3.51%
7	Wisconsin Southern Gas	7.52%	8.21%	9.26%	8.58%	8.27%
8						
9	Florida Public Utilities	6.72%	3.61%	4.17%	3.19%	4.46%

10
11 (1) Dividend per share growth, 1984-89 (from Schedule 3 data)
12 (2) Book value per share growth, 1984-89 (from Schedule 3 data)
13 (3) Dividend per share growth, current (1989-90) (App D)
14 (4) Retention ratio, average 1984-89 (App E)
15 (5) Weighted average (half-weight to DPSC)

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

DCF SUMMARY

	Growth	Yield	GrAdj Yield	DCF1	1989 M/B	Adj Yield	DCF2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Chesapeake Utilities	5.38%	6.38%	6.73%	12.10%	1.54	9.84%	15.21%
Delta Natural Gas	1.15%	7.69%	7.78%	8.93%	1.49	11.47%	12.61%
Essex County Gas	3.88%	7.40%	7.69%	11.57%	1.23	9.07%	12.95%
Fall River Gas	5.80%	4.99%	5.28%	11.08%	2.91	14.51%	20.31%
Mobile Gas Service	5.19%	4.96%	5.22%	10.41%	1.76	8.74%	13.93%
Roanoke Gas	3.51%	6.00%	6.21%	9.72%	1.41	8.48%	11.98%
Wisconsin Southern Gas	8.27%	3.65%	3.95%	12.22%	2.59	9.45%	17.72%
			Average	10.86%		Average	14.96%
			Median	11.08%		Median	13.93%
Florida Public Utilities	4.46%	4.32%	4.52%	8.97%	1.54	6.66%	11.12%

(1) Schedule 4, page 2, column 5
(2) Schedule 4, page 1, column 3
(3) Column 1 times Column 2 plus 100
(4) Column 3 plus Column 4
(5) Schedule 2, page 3, column 7
(6) Column (2) times Column (5)
(7) Column (1) plus Column (6)

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

MEASURE OF COST OF COMMON EQUITY USING CAPITAL ASSET PRICING MODEL

Capital Asset Pricing Model:

$Ke = Rf + Rp(B)$

Where:
- Ke = Current cost of equity
- Rf = Risk-free rate
- Rp = Risk premium
- B = Beta

Let risk-free rate be represented by U. S. Government Bond, 10% Issue of 2005/2010 (8.90%)

Let risk premium be equal to difference between common stock returns and long-term government bond returns (7.51%)

Let beta be equal to average of gas utility companies (0.70)

Risk Premium:	End of 1925	End of 1989	Arith Growth
Common Stocks	1.000	534.456	12.39%
LT Government Bonds	1.000	17.296	4.88%
Difference			7.51%

Calculation:

$Ke = 8.90\% + 7.51\%(0.70)$

$= 8.90\% + 5.26\%$

$= 14.16\%$

Source: Stocks, Bonds, Bills and Inflation, 1990 Yearbook
Ibbotson Associates (Chicago)

Schedule 6

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

COST RATE FOR TAX CREDITS
YEAR ENDED DECEMBER 31, 1989

		(M$) Amount	Percent	Cost	Return
		(1)	(2)	(3)	(4)
1	Long-term Debt	7,662	56.68%	9.78%	5.54%
2	Preferred Stock	237	1.75%	4.75%	0.08%
3	Common Equity	5,620	41.57%	13.85%	5.76%
4					
5	Total	13,519	100.00%		11.38%
6					

7 Pre-tax Coverage of Interest Charges:

8 11.38%-5.54%=5.84%/(1-.3763)=9.36%+5.54%=14.90%/5.54%=2.7x

Appendix A

R. S. JACKSON
BIOGRAPHICAL INFORMATION

Business Experience

A. 1957 to 1972: Accounting and financial specialist for Stone & Webster Management Consultants, Inc. Traveled extensively throughout the United States and Canada on special assignments for electric and gas utilities, oil, bus, steel and chemical companies, railroads and municipalities. These assignments included financial planning, merger and acquisition studies, economic analyses of alternatives, valuation studies and the development of earnings, cash flow and financing estimates.

B. 1972 to 1974: Vice President of Stone & Webster Management Consultants, Inc. Primarily involved in the preparation of cost of money and fair rate of return studies.

C. 1974 to present: Senior Vice President of Stone & Webster Management Consultants, Inc.

Regulatory Experience

A. Testified on financial matters, including cost of capital and rate of return, valuation and proposed financing of public utilities before the Federal Energy Regulatory Commission and its predecessor, the Federal Power Commission.

B. Testified before the state public service commissions of Alabama, Arizona, California, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Washington, West Virginia, Wisconsin and Wyoming.

Professional Affiliations

A. Member of the New York Society of Security Analysts and the Association for Investment Management and Research

B. Addressed and presented studies on a variety of financial matters at the American Management Association, the Midwest Gas Association, the Rocky Mountain Electrical League, the New England Gas Association, seminars sponsored by the Irving Trust Company of New York, IBM, Kidder Peabody, the American Water Works Association, the Chamber Institutes of Philadelphia, and at management development courses and executive seminars sponsored by Stone & Webster.

Education

A. New York University Graduate School of Business Administration, Corporation Finance and Economics (1974)

B. Fairleigh Dickinson University, Bachelor of Science degree in Accounting (magna cum laude) (1972)

C. Bentley College, Accounting and Finance (1957)

D. University of Miami, Liberal Arts (1952)

Appendix B

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

LIST OF COMPARISON COMPANIES

	(000) Total Capital	Common Equity Ratio	#Empl	#Gas Custs	#Shldrs
	(1)	(2)	(3)	(4)	(5)
Chesapeake Utilities	$56,735	55%	312	26,274	945
Delta Natural Gas	$35,092	44%	180	28,182	1,808
Essex County Gas	$44,748	38%	123	34,949	1,382
Fall River Gas	$28,439	44%	172	44,730	1,156
Mobile Gas Service	$47,054	54%	244	85,643	1,775
Roanoke Gas	$31,565	40%	177	41,149	922
Wisconsin Southern Gas	$20,236	58%	138	42,023	1,214
Average	$37,696	48%	192	43,279	1,315
Median	$35,092	44%	177	41,149	1,214
Florida Public Utilities	$34,471	41%	294	41,989	965

Source: Edward D. Jones & Co:
a. Financial & Common Stock Information, Month Ended Mar 31/90
b. 1988 Natural Gas Industry Review

Appendix C

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

MARKET PRICE OF COMMON STOCK AT END OF MONTH
APRIL 1989 TO MARCH 1990

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Apr/89	May/89	Jun/89	Jul/89	Aug/89	Sep/89	Oct/89
1	CHPK	$14.000	$13.750	$12.625	$14.000	$14.000	$14.500	$13.750
2	DGAS	$13.875	$13.875	$13.875	$14.500	$14.500	$14.500	$14.375
3	ECGC	$16.750	$17.750	$18.000	$17.000	$17.000	$18.250	$17.750
4	FRG	$35.500	$36.125	$36.625	$36.125	$36.500	$35.875	$35.875
5	MBLE	$15.500	$15.500	$15.375	$15.750	$15.750	$16.500	$16.250
6	ROAN	$32.500	$32.500	$33.000	$33.000	$33.000	$33.500	$33.500
7	WISC	$31.750	$31.500	$33.000	$32.000	$31.000	$30.500	$30.625
8								
9	FPUT	$23.500	$22.250	$23.250	$23.750	$23.750	$23.000	$24.000
10								12-Mo
11		Nov/89	Dec/89	Jan/90	Feb/90	Mar/90		Avg
12								
13	CHPK	$12.750	$12.500	$13.500	$11.250	$11.250		$13.156
14	DGAS	$14.250	$14.250	$13.750	$13.375	$13.375		$14.042
15	ECGC	$18.000	$18.000	$18.000	$18.750	$18.750		$17.833
16	FRG	$38.000	$38.000	$38.000	$38.000	$38.000		$36.885
17	MBLE	$17.000	$17.750	$16.000	$16.000	$16.000		$16.115
18	ROAN	$33.500	$33.500	$34.000	$34.000	$34.000		$33.333
19	WISC	$31.000	$34.500	$34.000	$34.000	$34.000		$32.323
20								
21	FPUT	$23.250	$23.500	$22.250	$22.875	$22.250		$23.135

Appendix D

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

LATEST ANNUAL DIVIDEND PAYMENT AND CURRENT ANNUAL RATE OF INCREASE

		1989	1990	Incr
		(1)	(2)	(3)
1	Chesapeake Utilities	$0.827	$0.840	1.61%
2	Delta Natural Gas	$1.080	$1.080	0.00%
3	Essex County Gas	$1.240	$1.320	6.45%
4	Fall River Gas	$1.840	$1.840	0.00%
5	Mobile Gas Service	$0.760	$0.800	5.26%
6	Roanoke Gas	$2.000	$2.000	0.00%
7	Wisconsin Southern Gas	$1.080	$1.180	9.26%
8				
9	Florida Public Utilities	$0.960	$1.000	4.17%
10				
11	Source: EDJones, March 1989 and March 1990			

Appendix E

FLORIDA PUBLIC UTILITIES COMPANY
NATURAL GAS DIVISION

GROWTH FROM RETENTION

	1984	1985	1986	1987	1988	1989	Avg* 1984-89
Payout Ratio:							
Chesapeake Utilities	48.4%	58.2%	71.7%	55.3%	76.6%	75.5%	
Delta Natural Gas	70.9%	103.0%	95.4%	93.7%	80.6%	100.9%	
Essex County Gas	65.5%	71.2%	72.0%	74.4%	66.1%	63.9%	
Fall River Gas	58.9%	63.1%	64.0%	66.7%	70.0%	81.8%	
Mobile Gas Service	52.1%	74.7%	89.3%	62.8%	52.1%	65.6%	
Roanoke Gas	37.8%	81.8%	107.8%	102.7%	52.9%	88.9%	
Wisconsin Southern Gas	44.9%	43.9%	80.5%	62.4%	50.2%	52.1%	
Florida Public Utilities	45.6%	76.9%	63.4%	67.2%	84.4%	80.0%	
Retention Ratio:**							
Chesapeake Utilities	10.57%	7.52%	4.16%	8.22%	3.29%	4.21%	6.33%
Delta Natural Gas	4.68%	-0.37%	0.57%	0.80%	2.77%	-0.13%	2.21%
Essex County Gas	5.18%	4.04%	3.55%	3.15%	4.61%	4.88%	4.23%
Fall River Gas	8.38%	7.32%	7.06%	6.33%	5.44%	3.53%	6.34%
Mobile Gas Service	7.95%	2.98%	1.07%	5.35%	8.09%	4.80%	5.04%
Roanoke Gas	13.25%	1.90%	-1.06%	-0.25%	8.15%	1.60%	6.22%
Wisconsin Southern Gas	12.01%	12.61%	2.53%	5.86%	9.60%	8.84%	8.58%
Florida Public Utilities	6.91%	1.96%	3.77%	3.22%	1.29%	1.98%	3.19%

*Excluding negative growth rates

**Return on common equity times (1 minus payout ratio)

DIRECT TESTIMONY
OF
KENNETH C. KESSLER

IN

FLORIDA PUBLIC UTILITIES COMPANY
DOCKET NO. 900151-GU

IN RE: PETITION OF
FLORIDA PUBLIC UTILITIES COMPANY
FOR A RATE INCREASE IN THE
NATURAL GAS OPERATIONS

Q. Please state your name and business address.

A. Kenneth C. Kessler. My business address is 401 South Dixie Highway, West Palm Beach, Florida 33401-5807.

Q. By whom are you employed and in what capacity?

A. I am employed by Florida Public Utilities Company as the Director of Marketing - Gas Division.

Q. Please briefly outline your educational qualifications and professional experience.

A. I received a Bachelor of Science degree in Commerce and Finance with a Major in Industrial Management from Bucknell University in 1948.

I was employed in 1952 by Dade Gas Company, the inter-related company of what is now known as the City Gas Company of Florida. Both companies were propane gas companies. My activities, while associated with "City Gas", were primarily sales. The introduction of natural gas into Florida (1959) provided for the conversion of "City Gas" propane customers to natural gas customers. I was responsible for all phases of sales -- residential, commercial, industrial air conditioning and motor fuel. Subsequent to the conversion to natural gas, I became associated with Tropigas International, a large propane gas company also operating throughout Florida. In the capacity of General Sales Manager, I directed sales activities throughout the areas of operation. I returned to "City Gas" as General Sales Manager in 1980 for a five year period which ended in 1985. During that time, I formulated the Energy Conservation Programs and the introduction of the vehicle usage of compressed natural gas. My marketing and sales functions during the past three years with Florida Public Utilities Company has been as Director of Marketing.

Q. Have you previously testified before the Florida Public Service Commission?

A. No, I have not.

Q. What are the subject matters of your testimony in this proceeding?

A. My testimony will relate to three items within the FERC functional accounts 911-916 - Sales Expense, on Schedule C-38, Page 5. Namely, piping allowances and sales supervision.

Q. On Schedule C-38, Page 5, you stated that in the base year piping for new construction and piping and venting for appliances replacing electric were being subsidized by the cost of the appliance being sold. Please explain how this was accomplished.

A. During the base year period the selling price of our major gas appliances included delivery, connection and installation of up to 15 feet of gas piping. In addition, if the appliance sold was a water heater replacing an electric water heater, eight feet of venting material was also included. This pricing method effectively reduced our expense to provide gas piping in newly constructed residences. The piping was provided to the builder at no cost as a piping allowance.

In 1989 we no longer sold appliances to the builders but still piped newly constructed houses at no cost. In addition to the increases in the cost of labor and materials, we had increased costs to connect the appliances. In 1984 our average cost to pipe a house and connect the appliance was $150.00; in 1989 it was $235.00.

In 1989, when we sold a water heater to replace an electric unit, the selling price included delivery and connection. The cost to provide the venting materials and gas piping necessary were charged to piping and conversion allowances. These costs averaged $52.00 per unit.

Q. On Schedule C-38, Page 5, you stated that competitive forces as well as increased building and fire code requirements have also increased the cost of installing gas piping. Please explain what occurred.

A. In 1984 the cost of a building permit to install gas piping averaged $10.00 per house. In 1989 the cost of the same type of permit was $20.00 to $30.00. In addition, in 1984 the average new construction installation required two inspections by a building department official. In 1989 the average new construction installation required a minimum of three inspections by a building official. The cost of these inspections are included in the permit fee but because of the additional inspection, the average installation required three trips to complete as opposed to two trips in 1984. Competitive forces which caused increased costs are partially explained in my answer to the previous question. We could no longer compete, price-wise, in selling appliances to developers nor could we compete in the electric replacement market when we inflated appliance pricing to offset the cost of piping and venting. In a few instances we have also had to increase piping and conversion allowances to offset the conservation rebates offered by the electric industry to replace standard electric water heaters with heat pump type heaters.

Q. On Schedule C-38, Page 5, you stated that it was necessary to reorganize your Sales Department to more closely coordinate the sales activities of four gas districts and to monitor compliance with local building and fire codes. Please explain the need for this reorganization.

A. In 1984 our Company either installed or had installed, under its jurisdiction, the gas piping and venting for most new commercial and residential customers which we served. Most piping and appliances were installed at that time to comply with the National Fire Protection Association's Pamphlet 54 and the Appliance Manufacturers Recommendations. In 1989, our Company did very little installation work for new commercial customers and only approximately 50 percent of the installation work for new residential customers. This work was done by the builders' plumbing contractors. At the same time, new fire codes had been adopted by jurisdictional agencies and some governmental entities had adopted the Southern Building Codes Congress Standard Gas Code. As a result of these changes, more and more of our customers were being denied certificates of occupancy due to non-conformance with the code requirements. Although we did none of this work, the builders and owners were being aggravated to the point that their future construction plans eliminated all gas usage. Our only solution was to increase the specialization within our sales department to better enable us to advise and assist the plumbers and builders with the changing code requirements and to coordinate the installation requirements of the various agencies during construction. By doing so, we eliminated most of the aggravation and simplified the installations of gas during construction. These actions eased but did not eliminated e developers, builders and owners never to

he future.

de your direct testimony?