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June 7, 1989

Mr. Steve Tribble, Director
Division of Records and Reporting
Florida Public Service Commission
101 East Gaines Street
Tallahassee, Florida 32301

Re: Docket No. 870098-EI

Dear Mr. Tribble:

Enclosed for filing are the Revised Testimonies of Florida Power & Light Company's witnesses Messrs. Hoffman and Kuberek containing revised amounts and minor text changes and deletions resulting from the updated studies. Text in the original testimony that made reference to the May 1989 Inflation Rate Forecast has been deleted. Additionally, references to "November 1987" Inflation Rate Forecast have been changed to "May 1989 Inflation Rate Forecast. The specific pages being revised are identified below.

	Kuberek	
	Page 5	Lines 2 - 5
	Hoffman	
	Page 6	Lines 16 - 19
		Lines 21 - 25 (deleted text)
	Page 7	Line 1 (deleted text)
	Page 8	Lines 5 - 6 (revised text)
	Page 9	Lines 3 - 6
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Page 22 Line 1
Page 23 Line 8
Lines 11 - 13 (deleted text)

Respectfully submitted,

Matthew M. Childs, P. A.

MMC:bl

Enclosures

cc: All Parties of Record

CERTIFICATE OF SERVICE
Docket No. 870098-EI

I HEREBY CERTIFY that a true and correct copy of Florida Power & Light Company's Revised Testimony of E.L. Hoffman and G. G. Kuberek was furnished to the following persons by U.S. Mail and Hand Delivery on this 7th day of June, 1989:

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By: _____

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF EDGAR L. HOFFMAN

DOCKET NO. 870098-EI

FEBRUARY 27, 1989

Q. Please state your name and business address.

A. My name is Edgar L. Hoffman, Jr., and my business address is 9250 West Flagler Street, Miami, Florida 33174.

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

A. I am employed by Florida Power & Light Company (Company) as Treasurer and Director of Finance.

Q. What is the purpose of your testimony?

A. To request consideration from the Commission for an increase in the Company's revenue requirements as they relate to the estimated costs associated with decommissioning the Company's four nuclear units at the St. Lucie and Turkey Point sites. The basis for this request is an updated engineering study performed by the independent consulting firm of TLG Engineering Inc. (TLG) which estimates an increase in the nuclear plant decommissioning costs upon which the current cost of service amounts are based. Additionally, my

testimony is meant to present responses to issues related to the process of Nuclear Plant Decommissioning as it relates to those parts of the Studies filed with the Commission in 1988 for which I am the primary witness.

Q. Please describe your educational and professional background and experience.

A. In January 1972, I graduated from the University of Wisconsin - Milwaukee with a Bachelor of Business Administration degree and received a Master of Business Administration degree in December 1974 from the same University.

In December 1971, I was employed by Wisconsin Electric Power Company, starting as a Financial Analyst and ultimately attained the position of Project Analyst. In 1978, I accepted the position with Florida Power & Light Company as a Senior Financial Analyst in the Finance Department. In 1980 I was promoted to Coordinator of Financial Planning and to Manager of Financial Analysis and Forecasts in December 1981. From December 1985 through May 1986 I was the Manager of Regulatory Accounting and Research. In June 1986 I was promoted to Director of Finance and Assistant Treasurer and to my current position as Treasurer and Director of Finance in January 1987.

Q. Are you sponsoring any schedules included in the Exhibits section of this filing?

A. No, I am not.

Q. **Before discussing the costs of nuclear decommissioning, what methodology is considered to be most appropriate by the Company for purposes of decommissioning its four nuclear units?**

A. Based on the Decommissioning Cost Studies prepared by TLG and the recommendation of Thomas S. LaGuardia of TLG, the Company's Decommissioning Steering Committee comprised of various Company executives, decided on the most appropriate decommissioning methodology for each of the Company's two nuclear sites. The Company chose to decommission its facilities in what may be considered a prompt, yet integrated manner. Factors considered in reaching a decision on the appropriate decommissioning methodology included cost, logistics, health, safety, security and the future regulatory environment.

The prompt (and integrated) decommissioning methodology is the least expensive of the conventional decommissioning alternatives (as defined in the Nuclear Regulatory Commission's (NRC) Nuclear Decommissioning Rule issued on June 27, 1988 and made effective July 27, 1988) available to the Company for both of its plants. As estimated by TLG, delayed decommissioning methods were anywhere from 11.3% to 23.7% more expensive for the St. Lucie Plant and from 11.2% to 30.4% more expensive for the Turkey Point Plant. Other important considerations dealt with eliminating potential uncertainties associated with a prolonged period of plant dormancy or entombment. Health and safety concerns related to a nuclear plant which sits idle for a prolonged period of time raise many unanswered questions. Concern for these health and safety uncertainties

were expressed by the NRC in its Nuclear Decommissioning Rule. Absent any clear showing of why a nuclear plant should be decommissioned on a delayed basis, the NRC recommended prompt dismantlement. Lastly, the prompt decommissioning methodology limits the Company's exposure to potentially costly regulatory actions which could be imposed on utilities having plants that remain dormant or entombed for extended periods of time.

Each of the two sites - St. Lucie and Turkey Point - has two units. Consequently, it is necessary to integrate the decommissioning process so that, at each site decommissioning of both units is performed simultaneously.

The current license expiration date for each of the two units at the Turkey Point Plant is April 27, 2007. Because of identical license expiration dates, preparations for and the activities associated with decommissioning occur in an integrated fashion over very much the same period of time. The terminology used by TLG to describe this methodology in its Turkey Point Decommissioning Cost Study is Integrated Prompt Removal/Dismantling.

A similar approach is planned for the St. Lucie Plant. However, current license expiration dates for Unit Nos. 1 and 2 are March 1, 2016 and April 6, 2023 respectively. Given this seven year difference in license expiration dates and the Company's decision to integrate the decommissioning process, it will be necessary to prepare (through what is termed "mothballing") Unit No. 1 for a period of dormancy. This dormancy period will last until the license expiration date of Unit No. 2, at which time the decommissioning activities for both units

will occur in an integrated fashion over the same period of time. The terminology used by TLG to describe this methodology in its St. Lucie Decommissioning Cost Study is Mothball/Prompt-Integrated Station Dismantling.

The integrated approach to decommissioning allows for a one time mobilization of personnel and equipment necessary to decommission the units at each of the two sites. The Company believes a one time mobilization effort will help to eliminate the potentially significant logistical considerations and costs necessary to organize resources at two different moments in time. Additionally, one time mobilization of resources allows for experience gained in the decommissioning of one unit to be more easily applied to the decommissioning processes at another unit.

Integrating the decommissioning process helps to eliminate concerns over having to secure one facility which is operating, from a unit which is being decommissioned. Congestion associated with decommissioning one unit could pose security problems at a site where another unit is still being operated. Important operational and safety considerations deal with the potential hazards associated with blasting activities necessary to complete the decommissioning process. Activities such as this which occur in close proximity to another unit which may still be operational, raise questions concerning the safety of continuing plant operations and its personnel. All of the previously mentioned points are especially true at the St. Lucie Plant, where license expiration dates are significantly different from one another.

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Q. **For the decommissioning methodology selected by the Company, what is the estimated appropriate cost in current (1988) dollars to decommission each of the nuclear units?**

A. The cost estimates contained in the Decommissioning Cost Studies approved by the Company were expressed in 1987 dollars. Using the escalation rate methodology discussed in testimony which follows, the estimated 1987 costs were escalated by the Company and expressed in 1988 dollars. The escalation rate methodology used produced slightly different rates for each of the four nuclear units in 1988. Given below, for each of the four nuclear units are the 1988 escalation rates as derived and the estimated future costs of decommissioning in 1988 dollars.

Unit	1988 Escalation Rate	Estimated Future Costs in 1988 Dollars
St. Lucie No. 1	4.01%	$206,262,473
St. Lucie No. 2	3.83%	203,421,665
Turkey Point No. 3	3.97%	162,771,355
Turkey Point No. 4	3.91%	191,133,750

These costs were escalated to 1988 based on the Company's May 1989 Inflation Rate Forecast.

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Q. What methodology and escalation rate were used to convert the current estimated decommissioning cost to the future decommissioning estimated cost?

A. Summary explanations of the escalation rate methodology and detailed calculations of the rates used to escalate the 1987 decommissioning cost estimates provided by TLG are provided in each of the 1988 Decommissioning Cost Studies filed with the Commission. Following is a further explanation of the escalation rate methodology used by the Company.

The decommissioning process consists of several activities. These activities have been summarized in the Company's Decommissioning Cost Studies as: Decontamination, Removal, Packaging, Shipping, Burial, Staff and Other. The costs associated with each activity can be expected to increase at different rates throughout time. An escalation rate methodology which considers the potential for escalation rate differences between decommissioning activities was used.

The Company's methodology considers the current and projected costs of each of the above decommissioning activities separately for purposes of computing an overall, or average escalation rate. Each of the previously defined decommissioning activities is separated further into three component parts; labor, material and other. The proportionate cost (in 1987 dollars) for each of these three components was provided to the Company by TLG Engineering Inc. Using the decontamination activity for St. Lucie Unit No. 1 as an example, the

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proportion of labor, material and other costs as a percentage of total costs for the Decontamination activity was 65.5%, 34.5% and 0.0% respectively.

With each of the decommissioning activities separated into labor, material and other components, the inflation index, from the Company's official May 1989 Inflation Rate Forecast, which was believed to best characterize future escalation of each cost component was determined. The inflation index used for the labor component, depended on whether it was craft or staff labor. An Average Hourly Earnings Index for construction workers was used for craft labor. Staff labor was escalated using a similar Average Hourly Earnings Index for service workers. The Producer Price Index (for capital equipment) and the GNP Deflator were used to escalate material and the other cost components, respectively.

The escalated costs for each of the different decommissioning activities were determined for each year of the Study. Summing the escalated costs of all activities for a particular year and comparing this cost relative to the previous year's cost provided the annual escalation rate for the total decommissioning process from one year to the next. This process was repeated for each of the four nuclear units over the applicable analytical horizon.

An overall effective rate, equivalent to the year by year rates was determined

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for each unit and are shown below.

Unit	Overall Escalation Rate
St. Lucie Unit No. 1	5.0%
St. Lucie Unit No. 2	5.0%
Turkey Point Unit No. 3	5.0%
Turkey Point Unit No. 4	4.9%

Q. **Given this escalation rate methodology, what is the total estimated cost of decommissioning each unit in future dollars based upon the present operating license termination dates?**

A. The following future dollar cost estimates are based on the Company's May 1989 Inflation Rate Forecast. For each of the Company's four nuclear units the current license expiration date and the total estimated future cost of decommissioning is given below.

UNIT	LICENSE EXPIRATION	EST. FUTURE COST
St. Lucie No. 1	March 1, 2016	$1,156,040,449
St. Lucie No. 2	April 6, 2023	1,272,855,821
Turkey Point No. 3	April 27, 2007	462,822,891
Turkey Point No. 4	April 27, 2007	557,567,350

These estimated future costs apply only to the decommissioning methodology selected by the Company for each of its two plants; Mothball/Prompt-Integrated Station Dismantling for St. Lucie Unit Nos. 1 and 2, and Integrated Prompt

Removal/Dismantling for Turkey Point Unit Nos. 3 and 4.

The estimated future costs for St. Lucie Unit No. 2 include the obligations of the Orlando Utilities Commission and the Florida Municipal Power Agency which own 6.08951% and 8.806% of the Unit respectively.

Q. **As presently planned, in which years will the funds accumulated in the Nuclear Decommissioning Trust Fund be expended for each unit?**

A. The years in which funds are to be expended by the Company to meet the estimated costs of decommissioning each of the four nuclear units is given below.

Unit	Year(s) of Fund Expenditures
St. Lucie No. 1	2014 - 2028
St. Lucie No. 2	2021 - 2028
Turkey Point No. 3	2005 - 2013
Turkey Point No. 4	2005 - 2014

The timing of fund expenditures for each unit is based on the Engineering Cost Study performed for the Company by TLG Engineering, Inc. and the decommissioning methodology selected by the Company for each of its four units. The greater number of years over which funds will be expended for St. Lucie Unit No. 1 versus those of Unit No. 2 is attributable to the difference in the operating license expiration date for the units. Because the operating license

of St. Lucie Unit No. 1 is currently expected to expire approximately seven years prior to that of St. Lucie Unit No. 2, fund expenditures are made for activities which enable Unit No. 1 to remain dormant until the license expiration of St. Lucie Unit No. 2. Upon License expiration of St. Lucie Unit No. 2, both Units will be decommissioned together on an integrated basis. Because there is no difference in license expiration dates for the Turkey Point Units, expenditures are made over approximately the same period of time.

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Q. **What is the estimated future cost of decommissioning by unit in each year in which decommissioning funds will be expended?**

For each of the Company's four nuclear units the estimated future cost of decommissioning for each year in which funds are expended, is given below.

Turkey Point Plant

Integrated Prompt Removal/Dismantling

Year of	Estimated Future Cost	
Decommissioning	Unit No. 3	Unit No. 4
2005	$ 1,043,067	$ 562,625
2006	4,432,678	2,437,959
2007	28,236,950	20,082,623
2008	87,716,291	29,831,671
2009	116,491,727	99,502,966
2010	122,316,313	131,947,742
2011	61,930,931	138,413,181
2012	30,114,852	77,328,929
2013	10,540,081	45,521,897
2014	———	11,937,757
Totals	$462,822,891	$557,567,350

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St. Lucie Plant

Mothball/Prompt - Integrated Dismantling

Year of Decommissioning	Estimated Future Cost Unit No. 1	Unit No. 2
2014	$ 1,634,646	
2015	6,411,176	
2016	68,854,515	
2017	24,649,790	
2018	10,980,815	
2019	11,529,856	
2020	12,106,349	
2021	12,711,666	$ 1,122,585
2022	65,026,359	4,672,311
2023	221,961,640	53,920,525
2024	241,815,795	237,021,222
2025	253,906,585	306,142,509
2026	112,271,649	321,449,635
2027	103,153,326	200,065,343
2028	9,026,282	148,461,690
Totals	$1,156,040,449	$1,272,855,821

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Q. **What are the annual accruals and revenue requirements in equal dollar amounts necessary to recover future decommissioning costs, net of tax, over the remaining life for each of the Company's nuclear power units?**

A. The following jurisdictional annual accruals and revenue requirements are needed to meet the estimated costs of decommissioning. These amounts are based on the Company's estimates of 1988 decommissioning costs and the May 1989 Inflation Rate Forecast which assumed an estimated decommissioning fund after-tax earnings rate of 5.5%.

Unit	Annual Accrual	Annual Revenue Requirements
St. Lucie No. 1	$ 8,325,464	$ 8,485,898
St. Lucie No. 2	7,113,878	7,250,965
Turkey Point No. 3	8,611,724	8,777,675
Turkey point No. 4	11,424,866	11,645,027
Total	$35,475,932	$36,159,565

The annual accruals and revenue requirements are assumed to be collected equally over the remaining operating life of each unit, beginning January 1, 1989. The annual accruals through the currently estimated remaining life of these units are amounts which will be needed to cover the currently estimated jurisdictional costs of decommissioning each of the four units. Because the Company is obligated to pay Regulatory Assessment Fees (0.125%) and Gross Receipts Tax (1.5%) along with a provision which must be made for

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Uncollectible Accounts (0.2656%) on its total revenues, the above annual revenue requirements exceed the accruals. An increase in the Regulatory Assessment Fee from 0.0833% to 0.125% which became effective January 1, 1989 was approved by the Commission at an Agenda Conference in November, 1988. As a result, the above revenue requirements differ from those submitted in our 1988 Decommissioning Cost Studies.

The annual revenue requirements above, represent an increase of $16,974,793 over the Company's current revenue requirements of $19,184,772 as established in previous Commission Orders.

Q. **What method is currently used by the Company to fund for decommissioning costs?**

A. Prior to Internal Revenue Service (IRS) Code Section 468A which provided for the establishment of qualified funds, the Company made contributions to a non-qualified fund. Contributions to the non-qualified fund were to be used to meet the cost of decommissioning all of the Company's nuclear units. The IRS Code which now provides for the establishment of qualified funding arrangements enable the Company to make an annual election to make either qualified or non-qualified contributions to the fund(s). Unlike the non-qualified fund, contributions to a qualified fund must be used to meet the costs of decommissioning a specific nuclear unit. Mr. Kuberek, in his testimony, discusses the regulations which govern qualified funding elections by the Company.

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Contributions to the qualified fund are made to an external trustee, State Street Bank & Trust Company (State Street), Boston, Massachusetts. State Street acts as a trustee for the qualified fund and has certain responsibilities to ensure that the qualified funds are in compliance with the requirements of Section 468A of the IRS Code and the terms and conditions of the Trust Agreement. In addition, State Street also provides custodial services to the Company as they relate to the qualified funds.

Contributions made to the non-qualified fund are also made to State Street, which also serves as Trustee for the non-qualified fund. State Street's responsibilities as Trustee for the non-qualified fund are not as broad as those required for the qualified fund. The Trustee has additional responsibility with respect to the qualified fund to ensure compliance with IRS Code Section 468A. The Company continues to control the selection of the investments for both the qualified and non-qualified funds.

As of December 31, 1988 the differences between actual fund balances and those which were used in the Decommissioning Studies follow:

	Adjusted Fund Balance Used in the Study (000's)	Actual (000's)	Difference (000's)
Qualified	$ 80,090	$ 78,067	$ 2,023
Non-Qualified	51,799	22,129	29,670
Combined	$131,889	$100,196	$ 31,693

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The differences between actual and projected fund balances are attributable to:

$ 26.7 million	Federal income tax refund receivable for tax years 1984 through 1986.
1.5 million	current and future State income tax adjustments (or deductions).
1.0 million	Accrual for December 1988 contribution to be deposited in January 1989.
2.5 million	market value versus book value.
$ 31.7 million	variance

For purposes of projecting decommissioning fund balances for year-end 1988 it was assumed in our Decommissioning Studies that the federal income tax refunds associated with Qualified Funding elections for years 1984 through 1986 had been received. To date, these refunds have not been received. Consequently, the above variance is largely due to timing differences.

The above State income tax adjustments are those attributable to making qualified funding elections for tax years 1984 through 1986. Because there is no actual State income tax refund associated with having made qualified funding elections for these years, the term "adjustment" is used to describe the fact that the Company takes a deduction on its State income taxes for purposes of realizing the amount attributable to qualified funding elections for years 1984 through 1986. A detailed explanation of the analytical treatment of the State income tax adjustments was provided in the 1988 Decommissioning Studies

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filed with the Commission. The assumed earnings rate on Federal and State income tax refunds/adjustments is 5.5%.

Q. **What are the costs associated with the trustee services and portfolio management of the Company's nuclear decommissioning fund?**

A. The fees payable to the trustee, State Street, are assessed on a sliding scale based on the market value of the securities being held and are paid by the Fund. The current fee schedule is as follows:

First $5 million	1/5th of 1%
Next $10 million	1/10th of 1%
Next $15 million	1/20th of 1%
Next $20 million	1/30th of 1%
Over $50 million	1/50th of 1%

In addition, nominal transaction and accounting fees are charged.

State Street was chosen as Trustee for the Fund because of their commitment to trust business, a high level of automation, technical sophistication and a competitive fee structure for services provided.

The management of the Fund's assets is presently performed by staff within the Finance Department. There are no plans to incur the additional cost of outside managers unless it could be demonstrated that an outside manager would

provide an incremental return with an equivalent level of investment safety. The Company's pension consultants estimate that the Fund would incur an additional annual cost of between 25 to 50 basis points if outside managers were to be utilized.

Q. What is the investment strategy for the Company's Nuclear Decommissioning Fund?

A. The primary objective of the fund is to provide the capital necessary for the decommissioning of the Company's nuclear power plants at the end of their respective licensing periods. To accomplish this, the strategy is to maximize the earnings growth of the portfolio while maintaining a high degree of safety so as to minimize future customer contributions. Safety will be increased through the use of fixed income investments, with quality controls and diversification guidelines used to manage credit risk. The higher after-tax returns from investments in municipal securities further strengthens the portfolio in meeting its funding objective.

In January 1988, the Company's nuclear decommissioning fund was separated into two components, non-qualified and qualified. A qualified fund was established to realize the tax benefits offered in Section 468A of the IRS Code. Meeting the requirements of Section 468A requires the assets of the qualified fund to be invested in assets as defined in the "Black Lung Act", which are public debt securities of the United States, obligations of state or local governments or time or demand deposits. The monies remaining in the non-

qualified fund are not subject to regulatory restriction.

The ability of a decommissioning fund to meet its future liabilities is based on the accuracy of cost estimates and the accompanying rate of inflation. Because inflation will play such an important role in meeting the future obligation of a decommissioning fund, the Company hopes to achieve a real return on the fund greater than the rate of inflation. To accomplish this, a decommissioning fund should pursue an investment strategy that is sensitive to change in the environment related to decommissioning costs, technology, regulation and financial market volatility. This means pursuing a course that diversifies market risk over time rather than matching all investment maturities with each plant's expected license expiration date. Because the Decommissioning Fund is a taxable entity, at the existing corporate tax rate of 34%, tax-exempt municipal securities provide the greatest economic benefit for both the qualified and non-qualified portfolios. Since establishing the reserve in 1983, the Company has pursued a strategy of using tax-advantaged fixed income instruments, namely, municipal bonds and preferred stock. Municipal bonds have consistently provided a higher after-tax benefit to the Fund than alternative taxable securities. During 1988 the average after-tax yield "pick-up" on new purchases of municipal bonds over U.S. Treasury Securities issued with comparable maturities was approximately 140 basis points.

Preferred stock has been an attractive investment from time to time because of the Dividends Received Deduction (DRD) to institutional investors. High quality sinking fund preferred stock has been used extensively in what is now

labeled the non-qualified fund but has lost some of its appeal due to the reduction of the DRD to 70% from 85% and the general lack of supply of high quality issues.

Q. **What is the asset structure of the decommissioning portfolios and what has been the historical investment performance?**

A. On December 31, 1988 the asset mix of the decommissioning fund was as follows:

	Non-Qualified (000's)	Qualified (000's)	Combined (000's)
Cash & Equivalents	$ 274	$ 1,195	$ 1,469
Municipal Bonds	20,040	76,872	96,912
Preferred Stock	1,815	-0-	1,815
Total	$22,129	$78,067	$100,196

The historical investment performance as of December 31, 1988 is as follows:

	After-Tax Time Weighted Rates of Return			
	Past 1 Year	Past 2 Years	Past 3 Years	Since Inception
Combined Fund	3.6%	3.1%	5.6%	8.0%

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Q. **How was the Company's 5.5% earning rate computed?**

A. Since earnings of the decommissioning funds are taxable, the funds receive the greatest benefit from tax free municipal bonds. An analysis of historical municipal bond yields was performed. Thirty-eight years of Moody's "Aa" 10 and 20 year municipal bond yields were examined and compared to the Consumer Price Index (CPI) for a like period. To smooth out the effects of market distortion, 30 year moving averages were calculated for both maturities. The 30 year moving average yield spread to CPI for the 10 year "Aa" municipal was calculated to be a negative 8 basis points. For the 20 year "Aa" municipal the spread was a positive 50 basis points. The average earnings rate was derived by weighting the average yield spreads to CPI of the 10 and 20 year "Aa" municipal bonds. By assuming a 50/50 weighting of the two spreads the following results were obtained:

Municipal Bond	Average 30 Year Spread Over/Under CPI	Assumed Weighting	Weighted Average 30 Year Spread Over/Under CPI
10 Year	-0.08%	50%	-0.04%
20 Year	0.50%	50%	+0.25%
			+0.21%

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Q. **How was the Company's 5.5% earning rate computed?**

A. Since earnings of the decommissioning funds are taxable, the funds receive the greatest benefit from tax free municipal bonds. An analysis of historical municipal bond yields was performed. Thirty-eight years of Moody's "Aa" 10 and 20 year municipal bond yields were examined and compared to the Consumer Price Index (CPI) for a like period. To smooth out the effects of market distortion, 30 year moving averages were calculated for both maturities. The 30 year moving average yield spread to CPI for the 10 year "Aa" municipal was calculated to be a negative 8 basis points. For the 20 year "Aa" municipal the spread was a positive 50 basis points. The average earnings rate was derived by weighting the average yield spreads to CPI of the 10 and 20 year "Aa" municipal bonds. By assuming a 50/50 weighting of the two spreads the following results were obtained:

Municipal Bond	Average 30 Year Spread Over/Under CPI	Assumed Weighting	Weighted Average 30 Year Spread Over/Under CPI
10 Year	-0.08%	50%	-0.04%
20 Year	0.50%	50%	+0.25%
			+0.21%

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By adding the weighted average yield spread above to the CPI as forecasted by the Company, an after-tax earnings rate was derived.

Company's Long Term Average CPI Forecast	Weighted Average Spread Over CPI	Assumed Earnings Rate Forecast
5.3%	0.21%	5.5%

Since the assumed earnings rate is tied to the Company's forecast of the CPI this rate will be subject to change from time to time.

Q. **Why does the Company feel this rate is appropriate?**

A. Based on the taxability of the decommissioning fund, it was determined that the most meaningful proxy for future earnings growth would be to compare historical long term municipal bond yields against CPI. This long term look at historical municipal bond yields gives a good picture of the trend of bond yields during periods of both very low and high periods of inflation and the effects that the "oil shock" of the 1970's had on the market. This demonstrates that over long periods of time it is difficult to beat inflation.

Because of the limited and erratic supply of high grade preferred stock issues,

it would be inappropriate to make an assumption that these higher yielding securities make up a significant part of the asset mix in the future and therefore, impact the Company's earnings rate assumption.

Total return measures include any unrealized appreciation or depreciation of a security which will vary with market fluctuations. This is particularly useful for securities which do not have a final maturity such as common stocks. Since the decommissioning fund is generally comprised of fixed income instruments which have a stated maturity and will be used to eventually fund a liability with a known payout date, it was determined that it will be the earnings cash flow and the compounding of those earnings that will provide the dollars required rather than price appreciation. For instance, assume a portfolio was to purchase a $1 million, 20 year bond at par, with a 5.6% coupon and that the reinvestment rate on the coupon payments is also 5.6%. Over the life of this bond the interest earned on interest represents over 40% of the total income. It is this income flow and accumulation of the reinvestment of that income that will finally determine the ability of the Fund to meet its obligation and therefore, was the determining factor in selecting this methodology. The Company's investment strategy has generally been one which focuses on long-term earnings accumulation, rather than one which attempts to capitalize on short-term price differentials between securities.

Q. **How often should contributions be made to the Company's Decommissioning Fund?**

A. The Company bills its customers for service provided on a monthly basis. A portion of the costs recovered in a billing cycle are considered costs associated with nuclear plant decommissioning. In that the costs are recovered by the Company on a monthly basis, monthly contributions to the fund are considered to be most appropriate. The current Decommissioning Studies assume that fund contributions and earnings are applied on a monthly basis.

Q. **Mr. Hoffman, does this conclude your testimony?**

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF

GARY G. KUBEREK

DOCKET NO. 870098-EI

FEBRUARY 27, 1989

Q. Please state your name and business address.

A. My name is Gary G. Kuberek and my business address is 9250 West Flagler Street, Miami, Florida 33174.

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

A. I am employed by Florida Power & Light Company (the Company) as Assistant Comptroller Corporate Tax.

Q. Please describe your educational background and business experience.

A. I am a graduate of the University of Tennessee with a Bachelor of Science degree in Business Administration, with a major in accounting. In addition, I have completed the Executive Program in Business Administration at Columbia University. I was employed by the Company in

1972 and have worked in its Accounting Department since that time. I have held various technical and managerial positions with the Company, including Tax Analyst, Manager of Corporate Tax, Assistant Comptroller and Manager of Corporate Tax; Assistant Comptroller and Director of Corporate Taxes and Property Accounting and my present position, Assistant Comptroller Corporate Tax. I was Chairman of the Edison Electric Institute Taxation Committee for the fiscal year 1982-1983. Before joining the Company, I held various positions with the Internal Revenue Service.

Q. Will you please describe your duties as Assistant Comptroller Corporate Tax?

A. As Assistant Comptroller Corporate Tax, I am responsible for directing the Company-wide functions concerning taxes and providing tax policy guidelines to all levels of the organization. In addition, I am responsible for advising management of the effect of taxes on business decisions.

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

A. The purpose of my testimony in this proceeding is to explain the Company's accounting [illegible]

decommissioning costs included in the Company's cost of service and significant changes in regulations occurring subsequent to the Company's last decommissioning hearing.

Q. How are nuclear decommissioning costs accounted for in the Company's books and records?

A. In compliance with Order No. 10987, Docket No. 810100-EU, issued July 13, 1982, the Company recovers the estimated nuclear decommissioning costs over the remaining life of the nuclear unit. The nuclear decommissioning costs are recorded as a separate expense in sub-account 403, Depreciation Expense. The related decommissioning reserves are also segregated within the accumulated provision for depreciation. Revenues collected associated with nuclear decommissioning costs are deposited in the funds on a monthly basis.

Q. Are the parties owning an interest in the nuclear units of the Company required to provide for their proportionate share of the total decommissioning costs?

A. Yes. The participation agreements are associated with St. Lucie Unit No. 2 and are between the Company and Florida Municipal Power Agency (FMPA) and Orlando Utilities

Commission (OUC), respectively. These agreements state that the participants shall make funds "available for payment of decommissioning (and disposal) costs on the same basis and with the same priority as (those) provided by the Company". Excerpts from the FMPA and OUC agreements are included in my Document No. 1.

Q. Based upon the Company's previously approved study, what are the annual amounts included in cost of service for nuclear decommissioning?

A. The annual amounts previously approved by the Commission and required for nuclear decommissioning are as follows:

	Total Company	Jurisdictional
Turkey Point Unit No. 3	$ 5,504,080	$5,355,895
Turkey Point Unit No. 4	4,022,756	3,914,544
St. Lucie Unit No. 1	5,019,875	4,884,338
St. Lucie Unit No. 2	4,796,115	4,667,100

Q. Based on the Company's petition in this proceeding, what are the annual amounts required to be included in the Company's cost of service?

A. The annual amounts required for nuclear decommissioning as filed in the Company's petition are as follows:

REVISED

	Total Company	Jurisdicional
Turkey Point Unit No. 3	$ 8,766,809	$ 8,611,724
Turkey Point Unit No. 4	11,630,612	11,424,866
St. Lucie Unit No. 1	8,475,393	8,325,464
St. Lucie Unit No. 2	7,241,989	7,113,878

Q. What is the projected date that each nuclear unit will no longer be included in rate base for ratemaking purposes?

A. For purposes of the present decommissioning filing, the Company projected that the nuclear units would be retired and removed from rate base for ratemaking purposes as follows:

Turkey Point Unit No. 3	April 27, 2007
Turkey Point Unit No. 4	April 27, 2007
St. Lucie Unit No. 1	March 1, 2016
St. Lucie Unit No. 2	April 6, 2023

Q. Have any laws been enacted or regulations been issued since the last decommissioning hearing which have a significant affect on nuclear decommissioning as discussed in your testimony?

A. Yes. Section 468A of the Internal Revenue Code was added by the Tax Reform Act of 1984 providing for an annual

election to make a tax deductible contribution to a qualified nuclear decommissioning fund if certain conditions are met.

In 1986, the Treasury Department issued Temporary Regulations under Section 468A. The Temporary Regulations provided transition rules which allowed a tax deduction for cash payments to a qualified nuclear decommissioning fund for tax years 1984 through 1986. The final regulations were issued in March 1988.

On June 27, 1988, the Nuclear Regulatory Commission (NRC) issued a final rule amending its regulations, to be effective July 27, 1988, requiring that financial assurance be provided so funds will be available for decommissioning nuclear units. This assurance must be demonstrated by one of the following methods: 1) Prepayment prior to the start of operation; 2) External sinking fund, or 3) A surety method, insurance or other guarantee method. Under the prepayment or sinking fund methods, the NRC would require that funds for nuclear decommissioning be segregated from the licensee's other assets and outside the licensee's administrative control. In addition, the NRC rules require utilities with pressurized water reactor units to [illegible]

minimum decommissioning funds based on megawatt thermal capacity. Under this rule, the Company would be required to provide a minimum of approximately $95 million per unit at Turkey Point and approximately $100 million per unit at St. Lucie (in 1986 dollars). These NRC estimates do not include costs to ship spent fuel and demolish non-radioactive structures, as the NRC does not consider these decommissioning activities. These amendments to the regulations effectively require a utility with an ownership interest in a nuclear unit to establish an external fund to provide for decommissioning of the nuclear unit.

In order to meet the conditions of Section 468A of the Internal Revenue Code and to comply with NRC requirements, the Company determined that the current arrangement, placing nuclear decommissioning funds with a trustee was required. This arrangement also complies with Order No. 10987 which states that "decommissioning cost of nuclear generating units shall be funded by use of a funded reserve".

Q. What is a qualified nuclear decommissioning fund?

A. A qualified nuclear decommissioning fund is a fund

established to meet the requirements of Section 468A of the Internal Revenue Code.

Q. What is the purpose of establishing a qualified fund?

A. The purpose of establishing a qualified fund is to permit the Company the opportunity to make an election to take a tax deduction for cash payments to a nuclear decommissioning fund. In the absence of an election under Section 468A of the Internal Revenue Code, payments to a nuclear decommissioning fund are not tax deductible until economic performance, i.e. actual decommissioning, occurs.

Q. What are the major requirements under Section 468A of the Internal Revenue Code for obtaining a tax deduction for a payment to a nuclear decommissioning fund?

A. The major requirements which must be met under Section 468A of the Internal Revenue Code in order to obtain a tax deduction are:

1. The taxpayer must receive a ruling from the Internal Revenue Service approving the schedule of amounts (ruling amount) applicable to the nuclear decommissioning fund;

2. The payments to the fund must be included in cost of service for ratemaking purposes. However, such amount is limited to the ruling amount for tax deduction purposes;

3. The taxpayer must establish a nuclear decommissioning trust fund for each unit; and

4. The fund investments must be limited to those enumerated in Section 468A of the Internal Revenue Code.

In my Document 2, I have included selected pages from the executive summary of the Company's filing which explains in more detail the requirements, the tax consequences and advantages and disadvantages of a qualified fund.

Q. Why did the Company elect to make contributions to qualified funds for years 1984 through 1987?

A. In Order No. 17467, Docket No. 870273-EI, issued on April 27, 1987, the Commission required the Company to file requests with the Internal Revenue Service seeking ruling amounts under Section 468A. The Company filed its request for rulings on May 7, 1987 and was issued ruling

amounts for the Turkey Point Units in December 1987 and the St. Lucie Units in January 1988. Upon receiving these ruling amounts, the Company had thirty days to make deposits to qualified funds for years 1984 through 1986 or lose the ability to make elections for such years. After giving consideration to the reduction in the corporate Federal income tax rate from 46% to 34%, effective July 1, 1987, the Company believed the advantages of the qualified fund outweighed the disadvantages for those years. The Company elected to make qualified contributions to nuclear decommissioning funds for tax years 1984 through 1986 and filed amended tax returns. Based on the previous analysis, the Company elected to make qualified contributions for 1987 in the original return as filed. The revenue requirements related to nuclear decommissioning determined in the Company's previous filing were premised upon a 46% Federal tax rate. With the lowering of the Federal tax rate to 34%, the Company incurred a projected deficiency in its funding. In fact, the annual revenue requirements requested under the petition as filed would have been higher had the Company not made these elections.

Q. Should the Company be required to elect qualified nuclear decommissioning contributions in the future?

A. No. While the required contribution must be funded each year, the Company decides whether to make contributions to either the qualified or nonqualified nuclear decommissioning fund based on the current facts and circumstances applicable to the Company. If the Commission were to require the Company to elect and make contributions to the qualified funds, it would take away the Company's ability to adapt to changes in circumstances in the future that might produce lower revenue requirements for our customers. By prescribing taxpayer elections, the Commission would impede the ability of the Company to avail itself of the most cost effective strategy and, therefore, I would strongly recommend against setting such a precedent.

Q. Does the Company believe its current filing will provide the funds necessary to decommission its nuclear units based on the current decommissioning study performed by TLG Engineering, Inc. and the cost escalation and inflation rates supported by the Company?

A. Yes. The Company believes that based on the current decommissioning study performed by TLG Engineering, Inc., and the cost escalation and inflation rates supported by the Company, the recovery of decommissioning costs net

forth in its petition will be sufficient to decommission the nuclear units upon termination of their licenses.

Q. Should the dismantlement of nuclear non-contaminated plant components be included in the funding for nuclear decommissioning, or recovered separately through depreciation based on the lives and costs specifically related to those nuclear non-contaminated reusable components?

A. At this time, the dismantlement of the nuclear non-contaminated plant components is and should be included in the funding for nuclear decommissioning. If the nuclear non-contaminated portion of the unit is retired at the same time as the nuclear portion, there would be no significant difference in total costs since such costs have not been considered in current depreciation studies and removal of such costs from the decommissioning study would cause an offsetting deficiency in depreciation reserves. If, however, at a future time, the nuclear non-contaminated portion is determined to have a useful life beyond the nuclear portion, it may be preferable to recover the related removal costs as a component of depreciation to more closely associate these costs with each unit's period of generation.

Q. Should a decommissioning cost study be required from the Company addressing the exclusion of nuclear non-contaminated components and facilities which can be used for generation of power subsequent to decommissioning of the present nuclear components?

A. Currently, as discussed by Company witness, Mr. Denis, it does not appear that there is any basis to conclude that nuclear non-contaminated components will have any significant value upon decommissioning. If it can later be established that the nuclear non-contaminated components and facilities have a useful life beyond the nuclear facilities, a cost study should be required and the removal cost of the nuclear non-contaminated portion would be spread over the extended period the unit would provide generation. Since this is not presently the case, no change to the study filed in the Company's petition should be made.

Q. If a decommissioning cost study is required addressing the exclusion of nuclear non-contaminated components and facilities, in what time frame should it be required?

A. If the Commission decides it is in the ratepayers' best interest to separate the nuclear non-contaminated portion

from the decommissioning study, I recommend that the proper time to incorporate this change would be in the Company's next decommissioning study.

Q. Does this conclude your testimony?

A. Yes, it does.

SECTION 18 - Decommissioning and Disposal

Company in its sole discretion shall have the authority to determine at any time when the Estimated Useful Life or Economic Life of St. Lucie Unit No. 2 has ended and thereupon to retire St. Lucie Unit No. 2. Company shall exercise said discretion in good faith. Thereupon, Company may take such action, on behalf of all Owners, as may be necessary to terminate operation and to place St. Lucie Unit No. 2 in a safe shutdown condition, and further may, in its sole discretion, decommission and dispose of and thereafter maintain St. Lucie Unit No. 2. Company shall have sole responsibility for, and is fully authorized to act on behalf of Participant with respect to termination of operation, decommissioning, disposal and subsequent maintenance of St. Lucie Unit No. 2 (including all related waste products and materials). Each Owner shall be responsible for its Ownership Percentage of all costs incurred in connection therewith (in accordance with Section 6), and shall be entitled to its Ownership Percentage of the salvage value of St. Lucie Unit No. 2. The provisions of this Section 18 are subject to the limited option provided in Section 20.

SECTION 19 - Provision for Decommissioning Costs

Beginning with Firm Operation, Company intends to provide for decommissioning and disposal costs through including in its depreciation rates and charges a negative salvage value applicable to St. Lucie Unit No. 2. Participant shall provide through its depreciation rates or through charges to its members or from other cash sources a provision for

decommissioning and disposal costs based on Participant's Ownership Percentage no less at any time than that accumulated by Company in its depreciation rates or through other charges as reported to or ordered by the Federal Energy Regulatory Commission or its successor based on Company's Ownership Percentage. If Company, by its own decision or by order of any governmental authority, provides at any time a fund or other security for decommissioning and/or disposal of St. Lucie Unit No. 2, Participant shall contribute to such fund or other security in proportion to its Ownership Percentage or establish a separate fund or security in proportion to its Ownership Percentage of such decommissioning and/or disposal costs which fund or security shall be available for the payment of decommissioning and disposal costs with no less priority than the fund provided by Company.

DECOMMISSIONING
FUNDING ALTERNATIVES
QUALIFIED vs. NONQUALIFIED

Qualified Decommissioning Fund

Section 468A of the Internal Revenue Code (Code) provides for an annual election for contributions to a qualified fund. Listed below are the requirements imposed by the Code and Treasury Regulations which must be met to secure the tax deduction as well as the tax consequences of utilizing a qualified decommissioning fund:

Requirements:

1. In requesting and obtaining a schedule of ruling amounts:

   (a) The Internal Revenue Service (IRS) will not provide a schedule of ruling amounts until a public utility commission (1) has determined the amount of decommissioning costs to be included in the taxpayers' cost of service, and (2) has disclosed the after tax return and any other assumptions used in establishing or approving such amounts for taxable years beginning on or after January 1, 1987.

   (b) A request for an initial or revised schedule of ruling amounts must be filed with the IRS on or before the "deemed payment deadline date" of the first taxable year to which the schedule of ruling amounts will apply, i.e. March 15 of the succeeding taxable year for calendar year taxpayers.

DECOMMISSIONING
FUNDING ALTERNATIVES
QUALIFIED vs. NONQUALIFIED (Cont'd)

Requirements: (Cont'd)

2. The maximum amount which can be contributed to a qualified nuclear decommissioning fund cannot exceed the lesser of:

   (a) The amount of nuclear decommissioning costs included in the cost of service for a taxable year (to the extent such costs are directly or indirectly charged to customers of the taxpayer by reason of electric energy consumed during such taxable year or are otherwise required to be included in the taxpayer's income); or

   (b) The applicable ruling amount for that year. The taxpayer must secure a schedule of ruling amounts from the IRS that will generally be determined on the same basis as that used for regulatory purposes, except that the ruling amount may not exceed the amount necessary to fund that portion of nuclear decommissioning costs which bears the same ratio to the total nuclear decommissioning costs as the period for which the qualified fund is in effect bears to the estimated useful life of the nuclear unit.

3. The assets held by a qualified fund can be invested only in the following types of securities:

   (a) Public debt securities of the United Sates.

   (b) Tax-exempt obligations of a state or local government that are not in default as to principal or interest; or

   (c) Time or demand deposits in a bank or insured credit union located in the United States.

4. A separate qualified decommissioning fund must be established for each nuclear unit. The fund must be maintained at all times in the United States pursuant to an arrangement that qualifies as a trust under state law and must be established for the exclusive purpose of providing funds for decommissioning.

DECOMMISSIONING
FUNDING ALTERNATIVES
QUALIFIED vs. NONQUALIFIED (Cont'd)

Tax Consequences

5. The tax effects of making an election under Code Section 468A are:

   (a) Contributions to the fund are deductible as long as they are paid to the fund by the "deemed payment deadline date", i.e. March 15 of the succeeding tax year for calendar year taxpayers;

   (b) All distributions from the fund are included in the taxable income of the electing taxpayer with the exception of direct payments of administrative costs and other incidental expenses of the fund;

   (c) In substance the Code allows a deduction in the year of decommissioning only to the extent that decommissioning expenses exceed the amount distributed from the qualified fund for decommissioning expenses; and

   (d) Contrary to the tax law in general, the taxpayer receives no deduction for decommissioning expenses paid with earnings of the qualified fund.

6. The tax effects on the qualified decommissioning fund are:

   (a) Contributions are not taxable to the fund;

   (b) Earnings of the fund are taxable at the highest corporate rate in effect for the tax year in which the earnings accrue; and

   (c) Administrative expenses paid by the qualified decommissioning fund (other than an amount paid to the electing taxpayer) are deductible by the fund.

DECOMMISSIONING
FUNDING ALTERNATIVES
QUALIFIED vs. NONQUALIFIED (Cont'd)

Advantages of a Qualified Fund

The two primary benefits of a qualified decommissioning fund are the increased revenue requirement stability and increased security of the fund.

Stability

Increased stability is provided over the remaining life of the plant, including the period of decommissioning. This increased stability is a result of the levelized IRS method of funding whereby the effect of tax changes are levelized and no particular vintage of customer gets a windfall or detriment solely due to the timing of tax rate changes.

Security

Increased security of funds is provided, since contributions to a qualified decommissioning fund cannot be used for any purpose other than decommissioning and the fund is limited in the nature of investments permitted. This insures that the funds are used only for the reason they were intended and not used for any other purpose.

Disadvantages of a Qualified Fund

The primary disadvantage of a qualified fund is its inflexibility as evidenced by the inability to transfer over or underfunded amounts to other units, the limits on the maximum amount which can be funded and the restrictions on investment alternatives.

Transfers

The inability to transfer dollars between funds is the most serious problem since it removes the ability to make up a shortfall in one fund with an overage in another fund.

DECOMMISSIONING
FUNDING ALTERNATIVES
QUALIFIED vs. NONQUALIFIED (Cont'd)

Disadvantages of a Qualified Fund (Cont'd)

Contribution Limits

The limit on the amount which can be contributed to a qualified fund each year makes it impossible to realize the tax advantages of the qualified fund for all amounts collected. Any portion of the amounts collected attributable to nonqualified decommissioning costs cannot be contributed to a qualified fund. In addition, any amounts contributed to a qualified fund are limited to the amounts collected based on energy consumed during the taxable year in question.

Investment Alternative Limits

The limits on investment alternatives could be a disadvantage in times when other financial alternatives would be more attractive.