<u>M E M O R A N D U M</u> April 28, 1989

ONIGINAL FILE COPY

TO : DIVISION OF RECORDS AND REPORTING

FROM: DIVISION OF LEGAL SERVICES (CHRIST)

RE : DOCKET NO. 870098-EI - PETITIONS FOR APPROVAL OF AN INCREASE IN THE ACCRUAL OF NUCLEAR DECOMMISSIONING COSTS BY FLORIDA POWER CORPORATION AND FLORIDA POWER & LIGHT COMPANY.

In lieu of prehearing statements, the Staff, Florida Power & Light Company, and Florida Power Corporation, files the attached Draft Prehearing Order for use during the prehearing.

MRC/sj

Attachment/Order

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DOCUMENT NUMBER-DATE 04246 APR 28 1989 FPSC-RECORDS/REPORTING

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petitions for approval of an) DOCKET NO. 870098-EI increase in the accrual of nuclear decommissioning costs by Florida Power Corporation and Florida Power & Light Company.

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ORDER NO.

ISSUED:

Pursuant to Notice, a Prehearing Conference was held _____, 1989, in Tallahassee, Florida, before Commissioner on Gerald L. Gunter, Prehearing Officer.

APPEARANCES:

MATTHEW M. CHILDS, Esquire, Steel, Hector and Davis, 310 West College Avenue, Tallahassee, Florida 32301-1406

On behalf of Florida Power and Light Company.

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JAMES McGEE, Esquire, P. O. Box 14042, St. Petersburg, Florida 33733 On behalf of Florida Power Corporation.

Public M. ROBERT CHRIST, Esquire, Florida Service Commission, Division of Legal 101 East Gaines Services, Street, Tallahassee, Florida 32399-0863 On behalf of the Commission Staff.

PRENTICE P. PRUITT, Esquire, Florida Public Service Commission, General Counsel, 101 East Gaines Street, Tallahassee, Florida 32399-0862 On behalf of the Commissioners.

DRAFT PREHEARING ORDER

Background

By Order No. 10987, issued July 13, 1982, in Docket No. 810100-EU(CI), this Commission required the establishment of a separate funded reserve, apart from the reserve for depreciation, for the accumulation of the estimated costs of decommissioning each nuclear unit operating in Florida. In particular, the Commission found that the decommissioning cost estimates "should be reviewed and, if necessary, changed no less often than every five years." Pursuant thereto, on January 26, 1987, Florida Power Corporation (FPC) filed an updated nuclear decommissioning study for its Crystal River Unit 3 nuclear plant, accompanied by a petition seeking approval of a revised annual accrual to its nuclear decommissioning reserve, based on the cost estimates and funding assumptions developed in the study. Similarly, on April 20, 1988, Florida Power & Light Company (FPL) filed nuclear decommissioning studies for its St. Lucie Nuclear Units 1 & 2, accompanied by a petition seeking approval of revised 810100-EU(CI), this Commission required the establishment of a nuclear decommissioning studies for its St. Lucie Nuclear Units 1 & 2, accompanied by a petition seeking approval of revised annual accruals to its nuclear decommissioning reserve. On June 29, 1988, FPL filed nuclear decommissioning studies for its Turkey Point Nuclear Units 3 & 4 and revisions to its studies on its St. Lucie Units. Also, on June 29, 1988, FPL filed a petition seeking approval of revised annual accruals to its nuclear decommissioning reserve for the Turkey Point Nuclear Units and the amended revised accruals for its St. Lucie Nuclear Units Lucie Nuclear Units.

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ORDER NO. Docket No. 870098-EI Page 2

On May 5, 1987, the Commission initiated a full revenue requirements rate proceeding with respect to FPC (Docket No. 870220-EI) and included the pending issue of FPC's nuclear decommissioning costs for consideration in the proceeding. As a result of a settlement subsequent approved by the Commission in that docket (Order No. 18627), FPC's annual accrual to its decommissioning reserve was increased by \$4.3 million effective January 1, 1989, together with a corresponding increase in its base rates.

On October 21, 1988, the Commission issued Order No. 20186 granting the petition of Metropolitan Dade County for leave to intervene. On February 27, 1989, FPC and FPL each filed their direct testimony. On March 31, 1989, Staff filed its direct testimony. Final hearings are scheduled to be held on May 25 and 26, 1989.

Use of Prefiled Testimony

All testimony which has been prefiled in this case will be inserted into the record as though read after the witness has taken the stand and affirmed the correctness of the testimony and exhibits, unless there is a sustainable objection. All testimony remains subject to appropriate objections. Each witness will have the opportunity to orally summarize his testimony at the time he or she takes the stand.

Use of Depositions and Interrogatories

If any party desires to use any portion of a deposition or an interrogatory, at the time the party seeks to introduce that deposition or a portion thereof, the request will be subject to proper objections and the appropriate evidentiary rules will govern. The parties will be free to utilize any exhibits requested at the time of the depositions subject to the same conditions.

Order of Witnesses

In keeping with Commission practice, witnesses will be grouped by the subject matter of their testimony. The witness schedule is set forth below in order of appearance by the witness's name, subject matter, and the issues which will be covered by his or her testimony.

Witness

Subject Matter

Issues

FPL

T. S. LaGuardia

Engineering cost estimates, alternatives evaluated, schedule of estimates as well as decommissioning feasibility and recommended method

4, 5, 6, 8, 9, 10, 24

| Witness | Subject Matter | Issues |
|---------------------|---|--|
| FPL | | |
| E. L. Hoffman | Selection of decom- missioning methodology, as well as determining additional annual . accrual requirements for inclusion in the Company's cost of service based on assumptions of inflation and investment earnings rates | 4, 6, 7, 8, 9, 10, 12, 13, 15, 16, 17, 21 |
| G. G. Kuberek | The accounting and tax treatment for nuclear decommissioning costs and significant changes in laws and regulations subsequent to the last decommissioning hearing | 2, 3, 11, 14, 18, 19, 20, 22, 23, |
| R. R. Denis | Feasibility of future use of non-contaminated plant and equipment | 1, 3 |
| FPC | | |
| Elizabeth A. Czura | Development of future decommissioning costs and annual accrual | 6 thru 11, 21 thru 25 |
| Kenneth E. McDonald | Decommissioning fund investment | 12 thru 18, 20 |
| Thomas S. LaGuardia | Development of decommissioning cost estimates | l thru 5, 9 |
| Staff | | |
| George W. Woerner | Appropriate timing and expenses associated with dismantling non- contaminated plant and facilities | 1, 2, 3 |

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EXHIBIT LIST

| | EXHIBIT LIST | |
|----------------|--------------------|---|
| Exhibit Number | Witness | Description |
| <u>FPL</u> | | |
| | LaGuardia | 1988 Decommissioning Study - St. Lucie |
| | Hoffman Kuberek | Units Nos. 1 & 2 as Revised on June 29, 1988 |
| | LaGuardia | 1988 Decommissioning- Study - Turkey Point |
| | Hoffman Kuberek | Units Nos. 3 & 4 as filed on June 29, 1988 |
| | LaGuardia | Cost and Schedule Estimate Summary for the St. Lucie Nuclaer Units Nos. 1 & 2 Document No. 1 |
| | LaGuardia | Cost and Schedul Estimate Summary for the Turkey Point Nuclear Units Nos. 3 4, Document No. 2 |
| | Kuberek | Excerpts from the Municipal Power Agency and Orlando Utilities Commission Participa- tion Agreement Document No. 1 |
| | Kuberek | Decommissioning Funding Alterna- tives Qualified vs Nongualified, Documen No. 2 |
| | Denis | Nuclear Decommissioning Table, Document No. 1 |
| FPC | | |
| Exhibit Number | Witness | Description |
| | Czura | CR-3 Decommissioning missioning Study Sections B through G |
| | McDonald | CR-3 Decommissioning Study, Section I |
| | LaGuardia | CR-3 Decommissioning Study, Sections H and J |
| | | |

PARTIES' STATEMENT OF BASIC POSITION

FPL: Florida Power & Light Company (FPL), pursuant to the procedures established in Docket No. 810100-EU, has completed and filed new decommissioning studies for its nuclear units, Turkey Point Unit Nos. 3 and 4 and St. Lucie Unit Nos. 1 and 2. Based on these studies FPL is requesting this Commission to authorize an increase in the annual accrual and funding of the reserves for the cost of decommissioning these nuclear units.

Based on these studies the total jurisdictional decommissioning cost estimates in current 1988 dollars for Turkey Point Unit Nos. 3 and 4 were \$160,210,146 and \$188,172,816, respectively and for St. Lucie Nuclear Unit Nos. 1 and 2, were \$202,843,912 and \$171,073,492, respectively. The annual jurisdictional accruals for these units based upon the new decommissioning studies are \$9,243,243 and \$12,628,212 for Turkey Point Nuclear Unit Nos. 3 and 4 and \$9,923,209 and \$8,092,801 for St. Lucie Unit Nos. 1 and 2, respectively.

At this time FPL is not requesting that its base rates be adjusted, however, the increased costs of nuclear decommissioning should be authorized to be included in cost of service, effective January 1, 1989.

FPC: FPC's basic position is that its Decommissioning Study was timely filed in January, 1987, in accordance with the five-year review interval previously established by the Commission, and that it provides a sound technical and economic basic for estimating the future cost of decommissioning the Crystal River 3 (CR-3) nuclear plant. Updates to the Study for revisions in escalation rates since the Study was filed strongly support and confirm the reasonableness of the annual decommissioning costs accrual approved by the Commission, effective January 1, 1989, in Order No. 18627, Docket No. 870220-EI. The Study updates indicate the need for an annual accrual of \$9,255,465, compared to the accrual of \$9,251,000 approved by the Commission.

STAFF: The estimated decommissioning costs submitted in the FPL and FPC studies are based on the assumption that non-contaminated as well as contaminated components at the nuclear plant sites will be dismantled or decommissioned upon the license termination of each unit. In Staff's opinion, non-contaminated components and facilities could be retained and used for future generation of electricity and therefore logic would dictate that the dismantlement of these assets be recovered through the use of lives and costs specifically related to them. In cost studies submitted with this docket, however, there is no way to distinguish between the costs of dismantling contaminated and non-contaminated assets at the time of decommissioning the nuclear facilities. For this reason, Staff's position is to basically accept each company's estimated decommissioning new studies based on the premise that the order in this proceeding new studies based on the premise that the non-contaminated assets at each nuclear unit could be used with a subsequent generating source of electricity after decommissioning of the contaminated components.

The annual accrual amounts proposed by FPL and FPC should also be adjusted to reflect escalation rates using projected inflation rates as of December, 1988. Further, in order to ensure the availability of the decommissioning funds at the time of license termination, the companies should be required to qualify the funds on a prospective basis pursuant to Section 468(a) of the Internal Revenue Code.

New accrual amounts should be implemented as of January 1, 1989.

STATEMENT OF ISSUES AND POSITIONS

ISSUE 1: Are there components and facilities now at the nuclear production units which could be retained to generate electricity with another steam source after the removal of the current contaminated steam generation components?

FPL: It is unknown at this time. Components with potential for reuse after decomissioning would be limited to the nuclear non-contaminated components. These would primarily include portions of the turbine-generator power block, cooling system and electrical grid interconnecting facilities. The usability of these components however, will depend on the wear-and-tear status at the time reuse is commenced, the economic viability of such reuse and the conformance to future regulatory standards. (Denis)

FPC: While it is possible that certain components and facilities at CR-3 could be used with a new, non-nuclear steam source, FPC believes this possibility is unlikely and should not serve as the premise for funding future decommissioning costs. (LaGuardia)

STAFF: Yes, there are portions of the nuclear electric generating units that, if not radioactive, could be retained and used for future generation of electricity. (Woerner)

ISSUE 2: Should the dismantlement of non-contaminated plant components be included in the funding for "Nuclear Decommissioning", or recovered separately through the use of lives and costs specifically related to those non-contaminated reusable components?

FPL: At this time, the dismantling 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 contaminated portion, there would be no significant difference in total costs since such costs have not been considered in current depreciation studies and the removal of such costs from the decommissioning study would cause an offsetting deficiency in depreciation reserves. However, if at a future time the nuclear non-contaminated portion is

determined to have a useful life beyond the nuclear contaminated portion, it may be preferable to recover the related removal costs as a component of depreciation to more closely match these costs with each unit's period of generation. (Kuberek)

FPC: FPC believes it is preferable to continue funding the total cost of decommissioning CR-3. FPC agrees with Staff that the costs of dismantling contaminated and non-contaminated facilities cannot be properly distinguished at this time. (LaGuardia)

STAFF: The dismantlement of non-contaminated plant components should be recovered separately through the use of lives and costs specifically related to those components. However, at this time, there is no way to distinguish between the costs of dismantling contaminated and potentially non-contaminated assets at the time of decommissioning. (Woerner)

ISSUE 3: Should a decommissioning cost study be required from each company addressing the exclusion of non-contaminated components and facilities which can be used for generation of power subsequent to decommissioning of the present nuclear components? If so, in what time-frame should they be required?

FPL: 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 contaminated facilities, a cost study should be required and the removal cost of the nuclear non-contaminated portion should be spread over the extended period the unit would provide generation. Since decomissioning studies are filed no less frequent than every five years, the change to exclude non-contaminated components and facilities should be incorporated in the Company's next studies. (Kuberek, Denis)

FPC: Future decommissioning studies should be premised on the plan considered most likely to occur, as opposed to a plan which is only a possibility. FPC does not believe that retrofitting a non-nuclear steam source to uncontaminated plant facilities is likely to occur. However, if the possibility of such a plan is to be pursued, its feasibility should be separately evaluated before deciding whether to base the next decommissioning studies on this plan. (LaGuardia)

STAFF: Yes, Florida Power & Light and Florida Power Corporation should file a new site-specific Nuclear Decommissioning Study for each of their nuclear generating plants premised on the possibility that, at the termination of the operating license, the non-contaminated portion of the nuclear plant assets could be used with a new generating source. These studies should be submitted no later than two years from the date of the order in this proceeding. (Woerner)

ISSUE 4: What methodology should Florida Power Corporation and Florida Power & Light utilize to decommission their nuclear units?

FPL: The appropriate methodology for decommissioning Turkey Point Unit No. 3 and 4 is an Integrated Prompt Removal/Dismantling approach. The selection of Integrated Prompt Removal/Dismantling for Turkey Point is presently the lowest cost method and was chosen, among other reasons, because it utilizes those individuals familiar with the nuclear facility to support the dismantling effort and is the method recommended by the Nuclear Regulatory Commission (NRC).

The appropriate methodology for decommissioning St. Lucie Unit Nos. 1 and 2 is a Mothball/Prompt Integrated Dismantling approach. The Mothball/Prompt Integrated Dismantling approach is the lowest cost and, due to the difference in license expiration dates, allows for a one time mobilization of contractor personnel and equipment by mothballing Unit No. 1 until the expiration of Unit No. 2's license. (Hoffman, LaGuardia)

FPC: The appropriate decommissioning methodology for CR-3 is the Prompt Removal/Dismantlement approach. (LaGuardia)

STAFF: The methodology that FPC and FPL should utilize to decommission their nuclear units is as follows:

| Turkey Point Unit No. 3: | Integrated Prompt/Removal Dismantling |
|--------------------------|---|
| Turkey Point Unit No. 4: | Integrated Prompt Removal/ Dismantling |
| St. Lucie Unit 1: | Mothball/Prompt Integrated Dismantling |
| St. Lucie Unit 2: | Integrated Prompt Removal/Dismantling |
| Crystal River Unit 3: | Prompt Removal/Dismantling |

ISSUE 5: Should there be a contingency allowance applied to the total cost at this time, and if so, what should the percentage be?

FPL: Yes. The contingency percentage is 25%. This percentage provides for the costs of high probability program problems where the occurrence, duration, and severity cannot be accurately predicted and have not been included in the basic estimate. The contingency provides for site specific problems that may arise and does not represent a provision for inaccurate cost estimates. If cost estimates were to be made at the time of commencement of decommissioning activities they would also include a contingency allowance of 25%. Contingency items that could occur include changes in the regulatory requirements, the effects of craft labor strikes, bad weather halting or slowing down waste shipments to the burial grounds, equipment/tool breakage, changes in the anticipated plant shutdown conditions, etc. Summation of the categories

examined, yielded an average contingency of approximately 25%. (LaGuardia)

FPC: Yes. The contingency allowance included in FPC's decommissioning study is intended to provide for the costs of problems that cannot be accurately predicted at the time decommissioning activities begin. It is not an allowance for uncertainties due to the time period between now and when those activities begin. Accordingly, subsequent five-year review proceedings will not affect the necessity for a contingency allowance. Sound engineering judgment based on actual decommissioning experience indicates that a 25% contingency allowance is reasonable. (LaGuardia)

STAFF: Since the purpose of a five year minimum review of the companies' decommissioning funds is to "zero in" on the actual cost of decommissioning, a contingency factor is not warranted at this time.

ISSUE 6: What is the estimated appropriate cost in current (January 1, 1989) dollars to decommission each of the nuclear units?

FPL:

| UNIT | Estimated Future Costs at 1/1/89 |
|-------------------------|-------------------------------------|
| Turkey Point Unit No. 3 | \$163,143,465 |
| Turkey Point Unit No. 4 | 191,618,110 |
| St. Lucie Unit No. 1 | 206,557,821 |
| St. Lucie Unit No. 2 | 204,031,505 |

(Hoffman, LaGuardia)

FPC: The appropriate estimated total cost in current dollars (as of January 1, 1989) to decommissioning CR-3 is \$195,133,000. (Czura)

STAFF: The estimated cost in current (January 1, 1989) dollars to decommission each of the nuclear units on a total company basis excluding any contingency allowance is as follows:

| Turkey Point Unit 3: | \$130,736,000 |
|-----------------------|---------------|
| Turkey Point Unit 4: | 153,629,000 |
| St. Lucie Unit 1: | 168,823,000 |
| St. Lucie Unit 2: | 163,631,000 |
| Crystal River Unit 3: | 156,106,000 |

ISSUE 7: What is the appropriate methodology and escalation rate to use in converting the current estimated decommissioning cost to the future decommissioning estimated cost?

FPL: An escalation rate methodology which considers the potential for escalation rate differences between the decommissioning activities of decontamination, removal, packaging, shipping, burial, staff and other is used. These activities are separated further into labor, material and other. Costs identified were inflated by use of the Company's Inflation Rate Forecast and/or Average Hourly Earnings Index in addition to Producer Prices Indices and GNP Deflator when appropriate.

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 for each unit and are shown below:

UNIT

OVERALL ESCALATION RATE

| Turkey Point Unit No. 3 | 5.48 |
|-------------------------|------|
| Turkey Point Unit No. 4 | 5.4% |
| St. Lucie Unit No. 1 | 5.5% |
| St. Lucie Unit No. 2 | 5.4% |

(Hoffman)

FPC: The methodology used by FPC in its Decommissioning Study for converting the current estimate of decommissioning costs to future costs is appropriate. The appropriate escalation rate to use in converting CR-3's current estimated decommissioning costs (in January 1, 1989 dollars) to future costs is 6.66%. (Czura)

STAFF: The methodology used by Florida Power & Light and Florida Power Corporation in their escalation rate analyses is reasonable for determining an appropriate escalation rate. The disparity among these numbers results from differences in the time frame and type of inflation measures used by each party.

The appropriate escalation rate to use in converting the current (1-1-89) estimated decommissioning cost to the future decommissioning cost for each nuclear unit is based on projected inflation rates as of December, 1988.

| Turkey Point Unit 3: | 6.35% |
|-----------------------|-------|
| Turkey Point Unit 4: | 6.34 |
| St. Lucie Unit 1: | 6.63 |
| St. Lucie Unit 2: | 6.48 |
| Crystal River Unit 3: | 6.67 |

ISSUE 8: What is the total estimated cost of decommissioning each unit in future dollars based upon present operating license termination date?

FPL:

| UNIT | LICENSE EXPIRATION | EST. FUTURE COST |
|--------------------|--------------------|------------------|
| St. Lucie No. 1 | March 1, 2016 | \$1,370,729,178 |
| St. Lucie No. 2 | April 6, 2023 | 1,473,080,158 |
| Turkey Point No. 3 | April 27, 2007 | 503,344,063 |
| Turkey Point No. 4 | April 27, 2007 | 621,942,760 |

The above was based on the Company's November, 1987 Inflation Rate Forecast. An updated Inflation Rate Forecast is expected to be completed by the Research Economics and Forecasting Department in May, 1989. (Hoffman, LaGuardia)

FPC: The total estimated cost of decommissioning CR-3 in future dollars based upon its present operating license termination date of December 3, 2016 is \$1,471,378,780. (Czura)

STAFF: The estimated total cost of decommissioning each nuclear unit in future dollars based upon present operating license termination dates, the escalation rates stated in ISSUE 7 and excluding any contingency allowance is as follows:

| Turkey Point Unit 3: | \$ 489,125,361 |
|-----------------------|----------------|
| Turkey Point Unit 4: | 608,703,970 |
| St. Lucie Unit 1: | 1,637,325,998 |
| St. Lucie Unit 2: | 1,734,127,975 |
| Crystal River Unit 3: | 1,180,573,324 |

ISSUE 9: As presently planned, in which years will the funds accumulated in the Nuclear Decommissioning Trust Fund be expended, by unit?

FPL:

| <u>Unit</u> | Year(s) of Fund Expenditures |
|---------------------|------------------------------|
| Turkey Point Unit 3 | 2005-2013 |
| Turkey Point Unit 4 | 2005-2014 |
| St. Lucie Unit 1 | 2014-2028 |
| St. Lucie Unit 2 | 2021-2028 |

(Hoffman, LaGuardia)

FPC: As presently planned, funds for decommissioning CR-3 will be expended in the years 2015 through 2023. (Czura, LaGuardia)

STAFF: As presently planned, the funds accumulated in the Nuclear Decommissioning Trust Fund will be expended in the following years:

Unit

Year(s) of Fund Expenditures

| 2005-2013 |
|-----------|
| 2005-2014 |
| 2014-2028 |
| 2021-2028 |
| 2015-2023 |
| |

ISSUE 10: What is the estimated future cost of decommissioning, by unit, in each year in which decommissioning funds will be expended?

FPL:

Turkey Point Plant:

Integrated Prompt Removal/Dismantling

| Year of | Estimate | d Future Cost |
|-----------------|---------------|---------------|
| Decommissioning | Unit No. 3 | Unit No. 4 |
| 2005 | \$ 1,115,261 | \$ 611,541 |
| 2006 | 4,757,530 | 2,662,549 |
| 2007 | 30,421,764 | 22,037,228 |
| 2008 | 94,863,296 | 32,891,160 |
| 2009 | 126,463,249 | 110,230,751 |
| 2010 | 133,292,265 | 146,870,251 |
| 2011 | 67,745,350 | 154,801,245 |
| 2012 | 33,067,696 | 86,896,867 |
| 2013 | 11,617,652 | 51,398,161 |
| 2014 | | 13,543,007 |
| Totals | \$503,344,063 | \$621,942,760 |

(Hoffman, LaGuardia)

St Lucie Plant:

Mothball/Prompt - Integrated Dismantling

| Year of | | Estimated | Futu | ire Cost |
|-----------------|------|-------------|------|-------------|
| Decommissioning | | Unit No. 1 | | Unit No. 2 |
| 2014 | \$ | 1,852,197 | | |
| 2015 | | 7,299,018 | | |
| 2016 | | 78,763,017 | | |
| 2017 | | 28,331,287 | | |
| 2018 | | 12,680,922 | | |
| 2019 | | 13,378,372 | | |
| 2020 | | 14,114,183 | | |
| 2021 | | 14,890,463 | \$ | 1,276,476 |
| 2022 | | 76,534,689 | | 5,333,059 |
| 2023 | | 262,488,312 | | 61,780,306 |
| 2024 | | 287,329,270 | | 272,605,419 |
| 2025 | | 303,132,380 | | 353,445,292 |
| 2026 | | 134,676,440 | | 372,531,338 |
| 2027 | | 124,327,707 | | 232,741,082 |
| 2028 | | 10,930,921 | | 173,367,186 |
| Totals | \$1. | 370.729.178 | \$1 | 473,080,158 |

(Hoffman, LaGuardia)

FPC: As presently planned, total costs for decommissioning in CR-3 will be incurred in the following future dollar amounts:

| Year of Decommissioning | Estimated Future Cost <u>Unit No. 3</u> |
|----------------------------|--|
| 2015 | \$ 35,395,715 |
| 2016 | 37,753,070 |
| 2017 | 40,267,425 |
| 2018 | 321,014,171 |
| 2019 | 342,393,714 |
| 2020 | 365,197,136 |
| 2021 | 156,681,553 |
| 2022 | 83,557,399 |
| 2023 | 89,118,597 |
| Total | \$1,471,378,780 |

(Czura)

STAFF: The estimated future cost of decommissioning, by unit, on a total company basis, in each year in which decommissioning funds will be expended is as follows:

Turkey Point Plant

| Year of Decommissioning | Estimated Unit No. 3 | 1 Future Cost <u>Unit No. 4</u> |
|----------------------------|-------------------------|------------------------------------|
| 2005 | \$ 1,041,046 | \$ 570,068 |
| 2006 | 4,480,877 | 2,504,741 |
| 2007 | 28,910,002 | 20,915,128 |
| 2008 | 90,962,296 | 31,494,809 |
| 2009 | 122,355,839 | 106,492,006 |
| 2010 | 130,125,435 | 143,154,190 |
| 2011 | 66,732,012 | 152,230,165 |
| 2012 | 32,866,783 | 86,215,517 |
| 2013 | 11,651,071 | 51,449,947 |
| 2014 | | 13,677,399 |
| Totals | \$489,125,361 | \$608,703,970 |

St Lucie Plant

| Year of Decommissioning | Ur | Estimated nit No. 1 | Future | Cost Unit No | . 2 |
|----------------------------|-----------------------------|------------------------|--|-----------------|-------|
| beeching berching | | | | | |
| 2014 | \$ | 1,997,130 | | | |
| 2015 | | 7,953,530 | | | |
| 2016 | 8 | 86,749,149 | | | |
| 2017 | 3 | 31,538,523 | | | |
| 2018 | 1 | 14,267,704 | | | |
| 2019 | 1 | 15,213,653 | | | |
| 2020 | 1 | 16,222,318 | | | |
| 2021 | 1 | 17,297,858 | \$ | 1,433,1 | 33 |
| 2022 | 8 | 89,859,167 | | 6,048,6 | 60 |
| 2023 | 31 | 11,489,720 | 7 | 0,790,7 | 67 |
| 2024 | 34 | 44,619,204 | 31 | 5,566,7 | 83 |
| 2025 | | 67,467,457 | | 3,338,3 | |
| 2026 | 16 | 55,009,098 | 44 | 0,122,6 | 88 |
| 2027 | | 53,960,453 | | 7,786,3 | |
| 2028 | | 13,681,036 | | 9,041,2 | |
| Totals | signation and subscriptions | 37,325,998 | · president and a family of the second | 4,127,9 | 10.00 |

| Crystal River Plan | <u>nt</u> |
|--------------------|-----------------------|
| Year of | Estimated Future Cost |
| Decommissioning | Unit No. 3 |
| 2015 | \$ 28,388,267 |
| 2016 | 30,281,765 |
| 2017 | 32,301,558 |
| 2018 | 257,533,984 |
| 2019 | 274,711,501 |
| 2020 | 293,034,758 |
| 2021 | 125,733,313 |
| 2022 | 67,059,161 |
| 2023 | 71,529,016 |
| Total | \$1,180,573,324 |

ISSUE 11: What is the projected date that each nuclear unit will no longer be included in rate base for ratemaking purposes?

FPL: 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. Luc | ie Uni | t No. | . 1 | | March | 1, 2016 | |
| St. Luc | ie Uni | t No. | 2 | | April | 6, 2023 | |
| | | | | | | | |

(Kuberek)

FPC: The projected date that CR-3 will be removed from rate base is December 3, 2016, the date its operating license is scheduled to terminate. (Czura)

STAFF: The projected date that each nuclear unit will no longer be included in rate base for ratemaking purposes is predicated on each unit's license expiration date.

| Turkey Point Unit 3: | April 27, 2007 |
|-----------------------|------------------|
| Turkey Point Unit 4: | April 27, 2007 |
| St. Lucie Unit 1: | March 1, 2016 |
| St. Lucie Unit 2: | April 6, 2023 |
| Crystal River Unit 3: | December 3, 2016 |

ISSUE 12: Should the investment of the decommissioning trust funds be managed internally or externally?

FPL: Internally. 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. (Hoffman)

FPC: The key consideration with respect to managing decommissioning fund investments is the availability of the specialized investment expertise needed to preserve the value of fund assets and thus assure the availability of sufficient funds to pay decommissioning costs at the time they are incurred. (McDonald)

STAFF: No position at this time.

ISSUE 13: What are the fee structures associated with the administration and management of the decommissioning trust funds for Florida Power & Light and Florida Power Corporation and are these appropriate?

FPL: The fee structures for FPL are appropriate. Administration fees payable to the trustee, State Street, are assessed on a sliding scale based on the market value of the securities. The current fee structure 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.

The management of the Fund's assets is presently performed by Staff within the Finance Department, therefore there is no fee structure associated with management of the decommissioning trust fund. (Hoffman)

FPC: The fee structures for FPC are appropriate. FPC pays the following annual fees: Trustee fees of 2/100 of 1% of the market value of the trust fund and investment manager fees of 29/100 of 1% of the market value of the trust fund. In addition, FPC pays investment performance evaluation consulting fees of \$1,438 for each quarterly performance evaluation. In 1988, FPC's trustee fees totaled \$4,115, and its investment manager fees totaled \$78,480. (McDonald)

STAFF: No position at this time.

ISSUE 14: Are the parties owning an interest in the nuclear units of Florida Power & Light and Florida Power Corporation providing their share of the total decommissioning costs? DOCKET NO. 870098-EI PAGE 16

FPL: The participation agreements are associated with St. Lucie Plant No. 2 and are between the Company and Florida Municipal Power Agency and Orlando Utilities Commission, respectively. These agreements state that the participants shall make funds "available for payment of decommissioning (and disposal) costs on the same bases and with the priority as (those) provided by the Company."

In September 1983, the Company notified each participant of their required annual contribution to their decommissioning fund. To verify that each participant is making the required contribution the Company requires copies of each participant's audited financial statements. The notes to these statements indicate that the participants have the required funds deposited in separate restricted accounts as identified on their books and records. (Kuberek)

FPC: The 10% co-owners of CR-3 are contractually obligated to provide their pro rata share of the plant's decommissioning costs. (McDonald)

<u>TAFF:</u> It appears that each Company has made necessary arrangements to ensure that the parties owning an interest in each of the nuclear units are providing for their fair share of the total decommissioning costs.

ISSUE 15: What is an appropriate investment strategy for a nuclear decommissioning trust fund?

FPL: Our investment strategy is an appropriate one in that it meets the primary objective of the fund which 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. 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. (Hoffman)

FPC: Agree with Staff. FPC's current strategy is consistent with the investment guidelines for a qualified trust fund under Section 468(a) of the Internal Revenue Code. (McDonald)

STAFF: The appropriate investment strategy for a nuclear decommissioning trust fund should ensure that each dollar contributed to the fund is available at the time of decommissioning and that the fund's assets earn a consistent positive real return over a market cycle. This criteria can best be met by a conservatively managed portfolio of limited maturity fixed-income securities.

<u>ISSUE 16</u>: What is the assumed appropriate fund earnings rate, net of tax, for a nuclear decommissioning trust fund?

FPL: Because of the liability to determine with complete certainty the future level of inflation or investment premiums an appropriate fund earnings rate cannot be determined. Since inflation will play such an important role in meeting the future obligation of a decommissioning fund, the Company hopes to achieve a return on the fund greater than the rate of inflation. The Company's most recent analysis indicates that based on long term historical relationships it is reasonable to expect an average fund earnings rate (net of tax) of 5.6% or 21% over forecasted CPI. 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. (Hoffman)

FPC: Agree with Staff. (McDonald)

<u>STAFF:</u> The appropriate fund earnings rate, net of tax, for a nuclear decommissioning trust fund should be equal to or greater than the rate of inflation.

ISSUE 17: How often should contributions be made to the company's decommissioning fund?

<u>FPL:</u> In that the costs are recovered by the Company on a monthly basis, monthly contributions to the fund are considered to be most appropriate. (Hoffman)

FPC: Agree with Staff. (McDonald)

<u>STAFF:</u> Contributions should be made to each company's decommissioning fund once a month.

ISSUE 18: Was it appropriate for Florida Power & Light and Florida Power Corporation to qualify the nuclear decommissioning funds under Section 468(a) of the Internal Revenue Code for 1984 through 1987?

FPL: Yes. After considering 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 annual revenue requirements requested under the petition as filed would have been higher had the Company not made these elections. (Kuberek)

FPC: No position. (McDonald)

STAFF: Yes, to ensure the availability of the monies at decommissioning, it was appropriate for the companies to qualify the decommissioning funds.

ISSUE 19: Was it appropriate for Florida Power & Light to not qualify the nuclear decommissioning funds under Section 468(a) of the Internal Revenue Code for 1988?

FPL: Yes, Florida Power & Light Company believes that it is in the customers best interest not to qualify the nuclear decommissioning funds when the Federal income tax rate is extremely low as in 1988. If the Federal income tax rate is higher in the year of decommissioning the customer will benefit by the reduced revenue requirements associated with the tax rate differential. Also, the customer may benefit from greater fund earnings since the investments in the non-qualified fund are not restricted as in the qualified funds. (Kuberek)

FPC: No position.

STAFF: No, the most conservative approach to ensuring the availability of funds would have been to qualify the decommissioning funds in 1988 rather than assuming future increases in tax rates.

ISSUE 20: Should utility companies, prospectively, be required to qualify nuclear decommissioning trust funds pursuant to Section 468(a) of the Internal Revenue Code?

FPL: No. The Company must be able to determine whether to make contributions to either the qualified or nonqualified nuclear decommissioning fund based on 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 that might produce lower revenue requirements for our customers. (Kuberek)

FPC: FPC believes its election to seek qualified fund status under Section 468(a) is justified by the benefits associated with such qualification, but that the decision whether or not qualification should be sought for each individual tax year in the future should remain with the utility, subject to the burden to justify the reasonableness of its decision. (McDonald)

STAFF: Yes, to assure the availability of the monies at decommissioning, the companies should be required, prospectively, to qualify the funds.

ISSUE 21: What is the appropriate annual accrual in equal dollar amounts necessary to recover future decommissioning costs over the remaining life of each nuclear power plant for Florida Power Corporation and Florida Power & Light?

FPL:

| <u>Unit</u> | Annual Accrual | Annual Revenue Requirements |
|--------------------|----------------|--------------------------------|
| Turkey Point No. 3 | \$ 9,243,243 | \$ 9,421,363 |
| Turkey Point No. 4 | 12,628,212 | 12,871,562 |
| St. Lucie No. 1 | 9,923,209 | 10,114,432 |
| St. Lucie No. 2 | 8,092,801 | 8,248,752 |
| Totals | \$39.887.465 | \$40.656.109 |

The revenue requirements exceed the annual accrual due to the need to provide for Regulatory Assessment Fees, Gross Receipts Tax and Uncollectible Accounts. (Hoffman)

FPC: In accordance with the settlement stipulation approved by Order No. 18627 in Docket No. 870220-EI, the retail portion of FPC's annual accrual for decommissioning costs was increased to \$9,251,000. This increase was derived from FPC's Decommissioning Study filed in this docket. (Czura)

STAFF: The appropriate jurisdictional annual accruals necessary to recover future decommissioning costs over the remaining life of each nuclear power plant are as follows:

| | Change In | |
|----------|-----------|---------|
| | Accrual | |
| Current | Based on | Total |
| Approved | Current | Annual |
| Accrual | Studies | Accrual |
| | | |

Florida Power & Light

| Turkey Point Unit # 3 | \$ 5,355,895 | \$ 1,561,250 | \$ 6,917,145 |
|-----------------------|--------------|--------------|--------------|
| Turkey Point Unit # 4 | 3,914,544 | 6,097,479 | 10,012,023 |
| St. Lucie Unit # 1 | 4,884,338 | 2,973,778 | 7,858,116 |
| St. Lucie Unit # 2 | 4,667,100 | 2,480,945 | 7,148,045 |
| Totals | \$18.821.877 | \$13,113,452 | \$31,935,329 |

Florida Power Corporation

Crystal River Unit # 3 \$9,251,000* (\$ 2,457,307) \$ 6,793,693

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Per Order No. 18627 in Docket No. 870220-EI

ISSUE 22: In which years are decommissioning costs projected to be included in the company's cost of service and what are the projected amounts that will be included each year?

FPL: Decommissioning accrual amounts will be included in the Company's cost of service each year until each unit's license expiration date. The accrual amounts Florida Power & Light Company is requesting are as follows:

| | TOTAL COMPANY | JURISDICTIONAL |
|-------------------------|---------------|----------------|
| Turkey Point Unit No. 3 | \$ 9,412,479 | \$ 9,243,243 |
| Turkey Point Unit No. 4 | 12,859,425 | 12,628,212 |
| St. Lucie Unit No. 1 | 10,104,895 | 9,923,209 |
| St. Lucie Unit No. 2 | 8,240,974 | 8,092,801 |
| | | |

(Kuberek)

FPC: Agree with Staff. (Czura)

STAFF: Decommissioning expenses or accrual amounts will be included in each company's cost of providing service each year until each unit's license expiration date. That accrual amount will be that which the Commission approves as being appropriate and will be subject to subsequent review at least once every five years.

ISSUE 23: What should be the effective date for adjusting the annual accrual amount?

FPL: Effective date for adjusting the annual accrual amount should be January 1, 1989. (Kuberek)

FPC: FPC's annual accrual was adjusted effective January 1, 1989, by Order No. 18627 in Docket No. 870220-EI. (Czura)

STAFF: The effective date for adjusting the annual accrual amount should be January 1, 1989.

ISSUE 24: What are the jurisdictional revenue requirements needed to recover the costs associated with the decommissioning of each nuclear unit?

FPL: The jurisdictional revenue requirements were based on FPL's estimates of 1988 decommissioning costs using the methodologies referenced in Issue 4. The decommissioning costs are assumed to be collected equally over the remaining operating life of each unit, beginning January 1, 1989. The jurisdictional revenue requirements for each of the units are:

| | Previously | Increase | Total |
|---------------------|-------------------|---------------------|---------------------|
| | Authorized | Based on | Annual |
| | by the | Current | Revenue |
| | <u>Commission</u> | <u>Studies</u> | <u>Requirements</u> |
| Turkey Point Unit 3 | \$ 5,459,105 | \$ 3,962,258 | \$ 9,421,363 |
| Turkey Point Unit 4 | 3,989,885 | 8,881,677 | 12,871,562 |
| St. Lucie Unit 1 | 4,978,857 | 5,135,575 | 10,114,432 |
| St. Lucie Unit 2 | 4,756,925 | 3,491,827 | \$ 8,248,752 |
| Totals | \$19,184,772 | <u>\$21,471,337</u> | \$ 40,656,109 |

(Hoffman, LaGuardia)

FPC: The additional jurisdictional annual revenue requirements needed to recover the costs associated with the decommissioning of CR-3, as approved for base rate recovery beginning January 1, 1989, by Order No. 20632, in Docket No. 870220-EI, are as follows:

| Amount Previously | Additional Amount Approved Effective | Total Approved Amount as of |
|----------------------|---|--------------------------------|
| Approved | January 1, 1989 | January 1, 1989 |
| \$5,031,000 | \$4,369,000 | \$9,400,000 |

(Czura)

<u>STAFF:</u> The jurisdictional revenue requirements needed to recover the decommissioning costs of each nuclear unit are as follows:

| | Previously Authorized by the Commission | Increase/ Decrease Based on Current Studies | Total Annual Revenue Requirements |
|--|---|---|--|
| Florida Power & Light | | | |
| Turkey Point Unit # 3 Turkey Point Unit # 4 St. Lucie Unit # 1 St. Lucie Unit # 2 | \$ 5,459,105 3,989,885 4,978,857 4,756,925 | \$ 1,572,311 6,187,537 3,009,075 2,509,206 | \$ 7,031,416 10,177,422 7,987,932 7,266,131 |
| Totals | \$19,184,772 | \$13,278,129 | \$32,462,901 |

Florida Power Corporation

Crystal River Unit # 3 \$ 9,400,000 (\$ 2,494,075)\$ 6,905,925

ISSUE 25: Should base rates be revised in this docket to reflect any change in revenue requirements?

FPL: Florida Power & Light Company is not requesting that its base rates be adjusted at this time, however, the increased costs of nuclear decommissioning should be authorized to be included in cost of service effective January 1, 1989. (Kuberek)

FPC: The additional revenue requirements associated with the increased annual accrual were approved for base rate recovery beginning January 1, 1989, by Order No. 20632 in Docket No. 870220-EI. (Czura)

STAFF: No position at this time.

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STIPULATED ISSUES

MOTIONS

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that these preceedings shall be governed by this order unless modified by the Commission.

By ORDER of Commissioner Gerald L. Gunter, as Prehearing Officer, this _____ day of _____.

GERALD L. GUNTER, Commissioner and Prehearing Officer

(SEAL) MRC