

**ORIGINAL
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**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

DOCKET NO. 900796-EI

FLORIDA POWER & LIGHT COMPANY

**IN RE: FLORIDA POWER & LIGHT COMPANY'S
PURCHASE OF GEORGIA POWER COMPANY'S**

ROBERT W. SCHERER UNIT NO. 4

DIRECT TESTIMONIES OF:

C. O. Woody

G. R. Cepero

R. R. Denis

S. S. Waters

H. A. Gower

DOCUMENT NUMBER-DATE

08690 SEP 28 1990

FSC RECORDS/REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF C. O. WOODY

DOCKET NO. 900796-EI

SEPTEMBER 28, 1990

1 Q. Please state your name and business address.

2 A. My name is C. O. Woody. My business address is 700
3 Universe Blvd., Juno Beach, Florida 33408.

4

5 Q. Who is your employer and what position do you hold?

6 A. I am employed by Florida Power & Light Company (FPL) as
7 Executive Vice President-Corporate Energy Supply.

8

9 Q. Please describe your responsibilities in that position.

10 A. I am responsible for the planning, construction, and
11 operation of FPL's generation and transmission system.
12 This includes all aspects of power generation (except
13 nuclear activities) and transmission. Developing a
14 system-wide plan for providing adequate, reliable service
15 at a reasonable cost to the customer is a part of the
16 planning functions under my responsibility.

1 Q. Please summarize your background and experience.

2 A. My undergraduate studies were in Electronic Technology.
3 I have subsequently received a Master's Degree in
4 Business Administration from the University of Miami. I
5 have also graduated from the Harvard Business School
6 Program for Management Development.

7
8 I have been employed by FPL since 1956, starting at an
9 entry level position at the Miami Beach Plant. I held
10 positions in plant operations, electrical maintenance,
11 and as Plant Superintendent prior to moving to the
12 corporate office in 1973 in a management position in the
13 Power Resources Department. From 1976 to 1987, I held
14 senior management positions in the area of nuclear
15 operations, including the positions of Manager, Director,
16 Vice President and Group Vice President. In 1987, I was
17 elected to my present position as Executive Vice
18 President, responsible for corporate energy supply.

19
20 I was associated with the Electric Power Research
21 Institute (EPRI) from 1980 to 1986, serving on the
22 Research Advisory Committee and as past chairman of the
23 Nuclear Power Division Committee. I am a member of the
24 Executive Board of the Southeastern Electric Reliability
25 Council and a member of the Engineering and Operation

1 Division Executive Committee of the Southeastern Electric
2 Exchange. I am also a member of the Power Generation
3 Committee of the Association of Electric and Illuminating
4 Companies and a member of the American Society of
5 Mechanical Engineers.

6

7 Q. Have you prepared an exhibit in connection with your
8 testimony?

9 A. Yes. It consists of two documents.

10 Document No. 1 is a map of the FPL service area.

11 Document No. 2 is the actual and projected energy
12 generated by resource type for the years
13 1989, 1990 and 1997.

14

15 Q. What is the purpose of your testimony?

16 A. The purpose of my testimony is to provide an overview of
17 the FPL system; to explain why the purchase of a share of
18 Georgia Power Company's Plant Robert W. Scherer Unit No.
19 4 (Scherer Unit No. 4) is necessary, reasonable, and
20 prudent and represents a unique opportunity for FPL; and
21 to summarize the reasons why FPL is requesting the
22 Commission's approval to include Scherer Unit No. 4's
23 total purchase price, including an acquisition
24 adjustment, in FPL's rate base.

25

1 Q. Please provide an overview of FPL's current system.

2 A. FPL is the principal subsidiary of FPL Group. FPL was
3 incorporated in 1925 and is the fourth largest investor-
4 owned electric utility in the United States when measured
5 by number of customers served, peak load, or total
6 electric sales. It is engaged in the generation,
7 transmission, distribution and sale of electric energy.
8 FPL provides electric energy to all or part of 35
9 counties in the state of Florida, mainly along the east
10 coast and the southwest coast of our state. This service
11 area covers 27,650 square miles and contains an estimated
12 population of over 5.9 million. At the local level, FPL
13 provides service to its customers through five divisions
14 which cover the entire service area shown on my Document
15 No. 1.

16
17 In 1980, FPL established a strategy to reduce its
18 dependence on oil as a fuel. That strategy has been
19 successful. We reduced our oil consumption from 44.5
20 million barrels in 1981 to 26.0 million barrels in 1989.
21 As shown on my Document No. 2, a majority of our customer
22 energy requirements in 1989 were met by a combination of
23 nuclear and coal resources, with the balance generated by
24 oil and gas resources. The Scherer Unit No. 4
25 acquisition that we are presenting to the Commission is

1 a coal-fired unit. The addition will help maintain a
2 diverse and flexible fuel mix on our system and will
3 avoid undue reliance on oil.
4

5 Q. Please explain why FPL intends to purchase a portion of
6 Scherer Unit No. 4?

7 A. The purchase of Scherer Unit No. 4 represents a unique
8 opportunity for FPL. It meets FPL's long-term capacity
9 needs and provides short-term benefits, while offering
10 advantages not available with other alternatives.
11

12 Q. Could you summarize the benefits of the proposed
13 purchase?

14 A. There are several benefits to the proposed purchase.
15 Where appropriate, benefits have been quantified in our
16 economic analysis.
17

18 All of our capacity addition decisions result from the
19 comprehensive planning process which Mr. S. S. Waters
20 describes. The results of that process demonstrate that
21 FPL requires additional capacity by 1996 in order to
22 continue to provide adequate and reliable service to our
23 customers. Scherer Unit No. 4 is the best of all the
24 alternatives available, inclusive of those identified
25 through FPL's "Request For Power Supply Proposals" (RFP)

1 process, to satisfy our capacity needs. Our purchase of
2 Scherer Unit No. 4 will be phased-in starting in 1991, as
3 described in Mr. G. R. Cepero's testimony. Therefore, in
4 addition to satisfying our long term capacity needs,
5 Scherer Unit No. 4 also provides short-term benefits.
6 Among these are: (1) a reduction of FPL's dependency on
7 oil at an earlier date; (2) a reduction in FPL's total
8 investment while locking in the price of the unit; (3)
9 the provision of capacity needed in 1991 to allow for the
10 upgrade of the Turkey Point Nuclear Station emergency
11 power system; and (4) a gradual increase to FPL's
12 capacity, thus adding flexibility to the Company's
13 ability to adjust for changes in load conditions or
14 construction requirements. No other alternative
15 available to FPL can provide these benefits.

16
17 Scherer Unit No. 4 is an existing unit with known
18 performance and costs. This eliminates risks associated
19 with design, engineering, licensing, permitting,
20 construction, and their potential for cost overruns.
21 This represents a reduction in risk when compared to
22 other generation additions, which must still be designed,
23 engineered, licensed, constructed and operated.

24
25 The purchase of the unit also includes associated

1 emission allowances. Also, should the life of the unit
2 extend beyond 30 years, as is the case with many fossil-
3 fired units, FPL will not have to build new capacity to
4 replace it, as it would have to for a power purchase.

5
6 Finally, the Scherer purchase will facilitate expansion
7 of the Southern/Florida transmission interface. To that
8 end, Southern Companies have agreed to utilize best
9 efforts to negotiate with utilities in Peninsular Florida
10 to expand the Southern/Florida interface to make an
11 additional 500 MW of interface capability available to
12 FPL.

13
14 In summary, the proposed purchase of Scherer Unit No. 4
15 will enable FPL to meet its future capacity needs, as
16 well as providing short-term benefits with a new, fully
17 licensed and operating unit at the most favorable cost.

18
19 Q. You mentioned alternatives identified through FPL's RFP
20 process. Please elaborate on these alternatives.

21 A. Briefly, FPL issued this RFP in July 1989 seeking
22 proposals to provide up to 800 MW of capacity with a
23 preferred in-service date of 1996. Proposals from
24 cogenerators, small power producers, independent power
25 producers and utilities, both from outside and within the

1 State of Florida, were accepted for consideration. FPL
2 received 34 proposals totaling 10,793 MW from 24
3 different respondents.
4

5 Mr. R. R. Denis will describe the RFP process in detail
6 in his testimony.
7

8 Q. Will you explain how the purchase of Scherer Unit No. 4
9 offers the opportunity to obtain capacity at favorable
10 cost?

11 A. Yes. As Mr. S. S. Waters explains, FPL has evaluated the
12 various potential options, including those solicited in
13 the RFP, to determine which offers the most favorable
14 conditions and has the lowest cost. The most favorable
15 option is the purchase of Scherer Unit No. 4, the aspects
16 of which are discussed by Mr. G. R. Cepero. The low risk
17 associated with obtaining capacity from an existing
18 licensed and operating unit is a significant
19 consideration.
20

21 Q. Why are you seeking approval of your proposed treatment
22 of the Scherer Unit No. 4 purchase at this time?

23 A. The opportunity to purchase a portion of Scherer Unit No.
24 4 is only available for a limited period of time. The
25 sale is also contingent on obtaining regulatory

1 approvals. Since the viability to FPL of this purchase
2 depends on the recognition by this Commission of the
3 purchase price in its rate base, approval of our request
4 is needed at the latest in early 1991 in order to make
5 Scherer Unit No. 4 a viable option.

6
7 Q. In light of the considerations you have discussed,
8 exactly what action is FPL asking this Commission to
9 take?

10 A. FPL is asking the Commission to find that the purchase of
11 Scherer Unit No. 4 is necessary, reasonable and prudent,
12 and that FPL can include the entire purchase price in its
13 rate base. FPL is not currently requesting an adjustment
14 in its rates to reflect this addition.

15
16 As described by Mr. G. R. Cepero, the purchase price is
17 about \$615 million for a 76.36% (646 MW) ownership share
18 of this 846 MW unit. Georgia Power's depreciated book
19 value for this unit is below the purchase price agreed to
20 by FPL. This difference represents an amount, or
21 acquisition adjustment, above net book value. We further
22 ask that we be allowed to amortize the acquisition
23 adjustment amount over the economic life of the unit.

24
25 As described by Mr. Hugh Gower, the purchase of Scherer

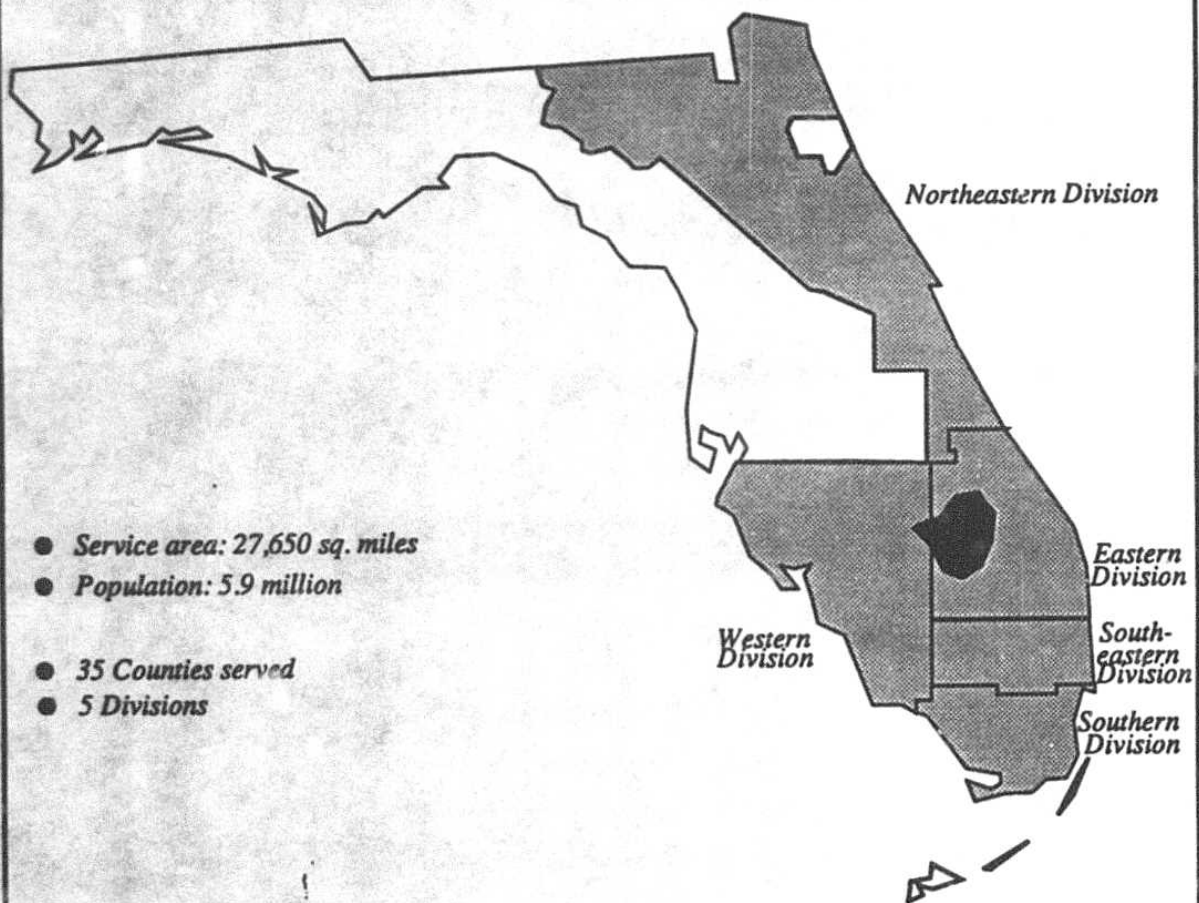
1 Unit No. 4 meets appropriate criteria for including the
2 acquisition adjustment within the rate base. The
3 testimony of other FPL witnesses supports that it is
4 reasonable and prudent to purchase Scherer Unit No. 4.
5 If the Commission were not to allow FPL's cost inclusion
6 in its rate base, the purchase would no longer be viable
7 leaving only options which are less favorable to FPL and
8 its ratepayers. Approval of the Scherer Unit No. 4
9 purchase is clearly the best alternative for our
10 customers.

11

12 Q. Does this conclude your testimony?

13 A. Yes.

FLORIDA POWER & LIGHT COMPANY SERVICE AREA



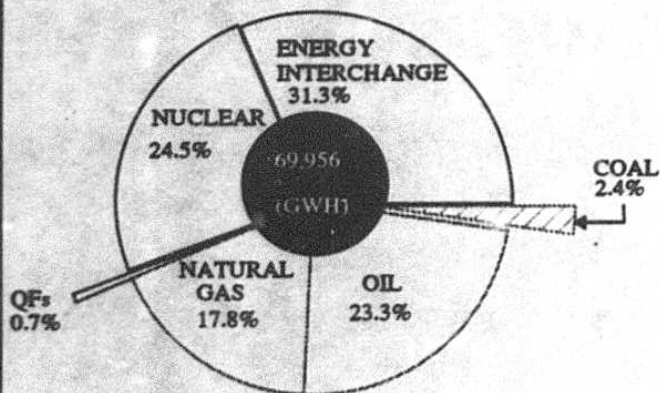
- Service area: 27,650 sq. miles
- Population: 5.9 million
- 35 Counties served
- 5 Divisions

Docket No.
FPL Witness: C.O. Woody
Exhibit No.
Document No.1
Page 1 of 1

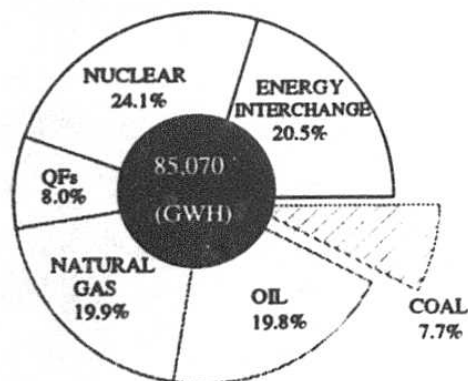
ENERGY BY FUEL TYPE

FACILITIES	ENERGY BY FUEL TYPE (GWH)		
	1989 ACTUAL	1990 PROJECTION	1997 PROJECTION
FPL FACILITIES			
COAL-FIRED	1,666	1,765	6,576
OIL-FIRED	16,331	11,868	16,820
GAS FIRED	12,438	14,266	16,942
NUCLEAR	17,171	18,011	20,497
QUALIFYING FACILITIES (QFs)	437	1,513	6,814
(NET) ENERGY INTERCHANGE	<u>21,913</u>	<u>23,836</u>	<u>17,421</u>
ENERGY FOR LOAD (NEL)	69,956	71,259	85,070

1989



1997



Docket No.

FPL Witness: C.O. Woody

Exhibit No.

Document No.2

Page 1 of 1

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF G. R. CEPERO

DOCKET NO. _____

SEPTEMBER 28, 1990

1 Q. Please state your name and business address.

2 A. My name is G. R. Cepero, and my business address is
3 9250 West Flagler Street, Miami, Florida 33174.
4

5 Q. Who is your employer and what position do you hold?

6 A. I am employed by Florida Power & Light Company (FPL) as
7 the Director of Bulk Power Markets. As such, I am
8 responsible for FPL's dealings with utilities, including
9 municipal and electric cooperative systems, Qualifying
10 Facilities and Independent Power Producers.
11

12 Q. Please describe your education and professional
13 experience.

14 A. I received a Bachelor of Electrical Engineering degree
15 from the University of Detroit in 1970, a Master of
16 Business Administration degree from Florida International
17 University in 1976, and a Juris Doctor degree from the
18 University of Miami in 1981. I also graduated from the

1 Harvard Business School's Program for Management
2 Development in 1989. Additionally, I have completed
3 numerous technical and management courses during my
4 career with FPL.

5
6 I joined FPL in January, 1971 as an Engineer Trainee in
7 the System Planning department and held various
8 engineering positions in that department until 1975. In
9 1975 I was promoted to Supervising Engineer and have
10 since progressed through several management levels to my
11 current position as department head. I have served as
12 Director of System Planning between 1986 and 1988; as
13 Director of Fuel Resources between 1988 and 1990; and
14 most recently as Director of Bulk Power Markets.

15
16 During my career I have gained experience in power system
17 planning, economic and financial analysis, power purchase
18 and sale agreements, and fuel planning and procurement.
19 I have also worked extensively on state and federal
20 regulatory matters and on coordination of planning
21 activities and joint ventures with other utilities.

22
23 Q. What are the purposes of your testimony?

24 A. The purposes of my testimony are to briefly describe the
25 Georgia Power Company's (GPC) Plant Robert W. Scherer

1 Unit No. 4, its common and associated facilities, and to
2 present the benefits and key terms and conditions of
3 FPL's proposed purchase of an undivided ownership
4 interest in such unit.

5

6 Q. Have you prepared an exhibit in connection with your
7 testimony?

8 A. Yes. It consists of three documents.

9

10 Document No. 1 is a detailed description, prepared by
11 GPC, of the design and facilities
12 comprising Scherer Unit No. 4.

13 Document No. 2 is a copy of the letter of intent
14 between FPL, GPC, Southern Companies,
15 and Jacksonville Electric Authority
16 (JEA) regarding the proposed purchase by
17 FPL and JEA of an undivided ownership
18 interest of Scherer Unit No. 4 (Scherer
19 Unit No. 4 Letter of Intent).

20 Document No. 3 is a copy of the letter of intent
21 between FPL and JEA regarding the
22 provision of transmission capacity and
23 service by JEA to FPL for capacity and
24 energy to be received from Scherer Unit
25 No. 4 (FPL/JEA Letter of Intent).

1 Q. Please describe the Scherer Plant and Scherer Unit No. 4.

2 A. The Scherer Plant is a four-unit electric generating
3 plant located near Macon, Georgia. The units are coal-
4 fired and are designed to be operated as base-load units.
5 The plant was designed by Southern Company Services, Inc.
6 and constructed by GPC. Scherer Unit No. 4 is the newest
7 of the plant's units, having been placed in commercial
8 operation in March, 1989. The unit has a demonstrated
9 net dependable capacity of 846 megawatts. Details of the
10 unit's design can be found in my Document No. 1.

11

12 The unit is a new, well-designed facility which
13 incorporates the construction and operating experience of
14 Southern Companies and the economies of scale and
15 standardization of a large four-unit power plant.

16

17 Q. Could you please summarize the arrangements between GPC
18 and FPL for the purchase of Scherer Unit No. 4?

19 A. There are actually four parties to the arrangements:
20 FPL, GPC, Southern Company Services, and the Jacksonville
21 Electric Authority (JEA). On July 31, 1990, these
22 parties entered into a Letter of Intent (Letter),
23 attached as my Document No. 2, for the sale of undivided
24 ownership interests in Scherer Unit No. 4 to FPL and JEA.
25 The Letter sets forth the principles under which the

1 parties will negotiate the necessary final agreements.

2
3 As expressed in the Letter, FPL intends to purchase 76.36
4 percent (about 646 MW) of the Unit and JEA the other
5 23.64 percent (about 200 MW). The purchase is to be
6 phased-in over a period of years, with completion of the
7 acquisition expected in 1995. FPL and JEA will acquire
8 an ownership interest in the Plant's common facilities,
9 including land, as well as in fuel stock, materials and
10 supplies, governmental permits, engineering records and
11 drawings, operation and maintenance procedures manuals,
12 and existing warranties. Emission and other such
13 environmental allowances will also be included in these
14 ownership rights.

15
16 The Letter contemplates agreements for purchases and
17 sales of interests in Unit 4, for the operation and
18 maintenance and fuel supplies for the Unit, for
19 transmission expansion and service, for UPS sales from
20 Southern Companies to FPL, and for assignment to FPL of
21 certain rights and obligations of JEA.

22
23 Q. Could you describe specific benefits of the proposed
24 arrangements?

25 A. The Scherer Unit No. 4 purchase arrangements present many

1 benefits to FPL, several of which are enumerated in the
2 testimonies of Messrs. Woody and Waters. In addition to
3 those benefits, there are other features of the proposed
4 arrangements that merit separate consideration.

5
6 By purchasing the unit FPL is also entitled to any
7 emission and other environmental allowances associated
8 with its ownership interest in the unit. This gives FPL
9 the ability to operate the unit, and increases
10 operational flexibility. Should it become necessary for
11 FPL to adjust its unit commitment and/or dispatch as a
12 result of environmental requirements, Scherer No. 4 can
13 be treated as any other FPL unit by virtue of these
14 allowances. Moreover, unlike power purchases which can be
15 expected to last a maximum of 30 years, the emission
16 allowances will permit operations for the full life of
17 the unit, which could extend to 40 or more years. In
18 addition, the emission credits may be available for use
19 past the retirement date of the unit.

20
21 An additional benefit of this extended life, which GPC
22 estimates at approximately 40 years, is that FPL will not
23 have to build new capacity to replace it until much
24 later, as it would have to for a power purchase.

1 Finally, a very significant benefit of the Scherer
2 purchase is that it will facilitate expansion of the
3 Southern/Florida transmission interface. As part of the
4 arrangements Southern Companies have agreed to utilize
5 best efforts to negotiate with utilities in Peninsular
6 Florida for the construction of additional transmission
7 facilities to expand the Southern/Florida interface. This
8 will improve the reliability of the system through the
9 provision of tie-line assistance and provide additional
10 opportunities for economy purchases and sales, not only
11 to FPL, but to the State. The Scherer purchase and the
12 opportunity for other transactions serve as an inducement
13 to the Southern Companies to build additional
14 transmission facilities to interconnect with Peninsular
15 Florida. The Southern Companies have indicated that the
16 construction of additional transmission facilities needs
17 to be an integral part of additional firm transactions,
18 notwithstanding the desires of Florida utilities.
19 Therefore, the Scherer Unit No. 4 purchase can be said to
20 be an essential element for the expansion of the
21 Southern/Florida interface.

22
23
24 Q. What is the anticipated price of Scherer Unit No. 4 to
25 FPL?

1 A. FPL has agreed to pay GPC a total of \$615,504,000 for
2 FPL's aggregate 76.36 percent undivided ownership share
3 of the unit, with the balance of the unit being purchased
4 by JEA. This price includes approximately \$22 million in
5 fuel and spare parts inventories, but does not reflect a
6 depreciation credit to the purchase price of
7 approximately \$0.5 million per month from November 1,
8 1990 until the first closing, and an estimated \$2 million
9 in costs associated with the purchase. This price may
10 also be subject to adjustments based on the cost of
11 capital improvements made during the pendency of the
12 sale; and the actual cost of the fuel, materials and
13 supplies inventories on the respective closing dates.
14 These adjustments will reflect actual costs; for example,
15 for more or less fuel, and in any event, are expected to
16 be a very small percentage of the total price.

17
18 Based on the net dependable capacity of the unit of 846
19 megawatts, FPL's ownership share would be equivalent to
20 646 megawatts of capacity. Therefore, FPL's purchase
21 price on a per-unit basis would be about \$953 per
22 installed kilowatt of capacity, including inventories.
23 The purchase price was the result of extensive and
24 vigorous negotiations with Southern Companies. FPL's
25 objective in the negotiations was to obtain the best

1 possible price for the unit based on the "value received"
2 by FPL. As described by Mr. S. S. Waters in his
3 testimony, this purchase has the best economics of the
4 options available to FPL. As I previously discussed, the
5 purchase also offers benefits which we have not attempted
6 to quantify.

7
8 Q. How does the negotiated price for Scherer Unit No. 4
9 compare to GPC's book value of the unit?

10 A. As described in Mr. Hugh Gower's testimony, the purchase
11 price includes an acquisition adjustment of approximately
12 \$111.4 million, which represents the amount to be paid in
13 excess of the projected depreciated book value of the
14 unit. The exact amount of the acquisition adjustment
15 cannot be determined with certainty until the closing
16 dates are established and the exact amount of fuel stock
17 and materials and supplies included in the purchase have
18 been determined.

19
20 Q. What are the other key components of the purchase that
21 affect the total cost of the transaction?

22 A. The other key components are the operation and
23 maintenance (O&M) costs for the unit and the expected
24 fuel costs. In this regard the letter of intent provides
25 for separate agreements to be negotiated.

1 The O&M agreement will provide for operation and
2 maintenance, administrative and general expenses, and an
3 operating fee to be paid to GPC who will operate the unit
4 on behalf of the owners. An estimate of these expenses
5 has been provided by Southern and incorporated in the
6 economic analysis performed by Mr. Waters. While these
7 matters are under negotiation, FPL believes that the
8 estimates used are appropriate for economic analysis
9 purposes.

10
11 With respect to fuel, the letter of intent provides for
12 FPL and JEA to assume 25% of all existing fuel contracts
13 for Plant Scherer. As owners, FPL and JEA are to
14 participate in future fuel supply decisions. The letter
15 also allows FPL and JEA to terminate their obligations
16 under the letter if they determine that the expected
17 average cost of fuel will not be competitive with long-
18 term prices for comparable fuel. FPL has therefore used
19 in the economic analysis performed by Mr. Waters an
20 expected coal price based on FPL's acceptance of 25% of
21 existing contracts and FPL's own estimate of coal prices
22 for the balance.

23

24 Q. Could you describe the phased-in purchases?

25 A. The letter of intent provides for four different closing

1 dates for FPL'S portion of the purchase. The projected
2 closing dates associated with the delivery schedule are
3 as follows: January 1, 1991 (17.73%); June 1, 1993
4 (31.44%) June 1, 1994 (16.55%); and June 1, 1995
5 (10.64%).
6

7 Q. Why is FPL contemplating purchasing an ownership interest
8 in Scherer Unit No. 4 in accordance with a delivery
9 schedule instead of a single transaction?

10 A. FPL is purchasing under a delivery schedule as these were
11 the terms proposed by Southern. However, this delivery
12 schedule provides FPL some additional benefits:

- 13 • FPL would be able to "lock in" a fixed purchase
14 price up to four years earlier than the total cash
15 outlays;
- 16 • the delivery schedule would assist FPL in meeting
17 the capacity needs arising specifically from the
18 Turkey Point Upgrade Project and provides additional
19 capacity to meet contingencies such as load growth
20 increases or delays in the in-service date of
21 generating facilities; and
- 22 • a reduction in total capital expenditures, and
23 consequently financing requirements, would accrue to
24 FPL, when compared to construction of FPL
25 facilities.

1 Q. How would the Scherer Unit No. 4 acquisition help meet
2 FPL's capacity needs arising from the outage of the
3 Turkey Point units?

4 A. As part of the Scherer Unit No. 4 acquisition
5 arrangement, Southern Companies have agreed to sell FPL
6 an additional 300 megawatts of Unit Power Sales (UPS)
7 capacity. The sale of additional UPS would be broken
8 down into two time periods: A firm sale from November 1,
9 1990 through December 31, 1990 (Initial UPS); and a sale
10 beginning January 1, 1991 (if the first closing did not
11 occur on that day) and terminating on June 30, 1991, or
12 the date of the first closing, whichever occurred first.

13
14 In addition to providing firm capacity during the period
15 of the Turkey Point Upgrade Project, the additional UPS
16 sale would also have the advantage of inducing Southern
17 Companies to agree not to pursue the sale of Scherer Unit
18 No. 4 to others through December 31, 1990.

19
20 Q. What is the basis for FPL's belief that Scherer Unit
21 No. 4 is reliable, economical, and environmentally sound?

22 A. FPL is confident of the reliability, economic operation,
23 and environmental soundness of Scherer Unit No. 4, due to
24 the fact that it is an operating unit with a demonstrated
25 record of reliability, heat rate, and environmental

1 performance. The unit is of modern design and
2 incorporates all of the lessons learned by the Southern
3 Companies in their extensive construction and operation
4 experience. In addition, Scherer Unit No. 4's "sister
5 units" at the Scherer Plant have demonstrated the
6 performance capabilities of the basic design over longer
7 periods of time.

8
9 Additionally, Southern Companies have agreed to sell to
10 FPL energy from other units sufficient for FPL to achieve
11 the equivalent of a 90 percent capacity factor from FPL's
12 ownership interest in Scherer Unit No. 4 through at least
13 December 31, 1994.

14
15 Finally, FPL has conducted technical inspections of the
16 facility and will conduct extensive "due diligence"
17 investigations prior to all closings to identify any
18 potential legal, operational, equipment, or environmental
19 risk or liability.

20
21 Q. Could you describe what needs to happen to complete the
22 purchase and by when?

23 A. There are essentially five groups of agreements that must
24 be completed by December 31, 1990. They are: a Purchase
25 Agreement; Operating Agreements; Transmission Service

1 Agreements; Transmission Expansion Agreements; and Short
2 Term Power Purchase Agreements.

3
4 In addition to these agreements being finalized,
5 regulatory approvals must be obtained from this
6 Commission, from the Securities and Exchange Commission
7 and from the Federal Energy Regulatory Commission. These
8 approvals, particularly this Commission's, must be
9 obtained as early as possible, but in no event later than
10 early 1991 in order to allow the transaction to proceed.
11 FPL cannot proceed with closing absent Commission
12 approval for inclusion of the entire purchase price in
13 FPL's rate base.

14
15 Q. Could you describe the status of these agreements?

16 A. The Purchase Agreement sets forth the terms and
17 conditions pursuant to the letter of intent. The price
18 and delivery schedules for the transfer have already been
19 identified as previously described. The parties are
20 conducting due diligence investigations to confirm
21 various aspects of the transfer and are negotiating a
22 draft contract at this time.

23
24 The Operating Agreements will define terms and conditions
25 for operation, maintenance, unit commitment and dispatch,

1 fuel supply, capital improvements and compensation for
2 services. The operating and maintenance contract will
3 provide for GPC operating and maintaining the unit as
4 FPL's agent. FPL (and JEA, as co-owner) will retain
5 decision-making authority regarding resources and
6 budgets, dispatch of the unit, operating philosophy,
7 maintenance philosophy, major maintenance items, and
8 overhaul scheduling. Obviously, coordination with GPC on
9 these items would be required. The fuel supply agreement
10 would provide FPL and JEA the opportunity to participate
11 in the long-term coal supply procurement process for all
12 future coal supplies. These agreements are under
13 negotiations at this time.

14
15 The Transmission Service Agreements will establish the
16 terms and conditions for delivery of Scherer Unit No. 4
17 power to the Florida/Southern interface. The letter of
18 intent sets forth the basic components of the GPC
19 transmission rate. An agreement with JEA is being
20 finalized to allocate the jointly owned transmission
21 interface capacity (a letter of intent between FPL and
22 JEA establishing the principles for this is attached as
23 my Document No. 3). Also, an agreement for short-term
24 transmission service with JEA has been executed.

1 The Scherer purchase is contingent on, and will
2 facilitate expansion of, the Southern/Florida
3 transmission interface. Studies of expansion
4 alternatives, including required Florida improvements,
5 are currently underway. Transmission expansion agreements
6 will be developed to accomplish the expansion.

7
8 Short Term Power Purchase Agreements are required for the
9 1990 300 MW Initial UPS purchase and for the 1991 UPS
10 purchase. The contract for the Initial UPS has been
11 negotiated and filed with FERC. The key terms of the
12 1991 UPS purchase have been negotiated and incorporated
13 in the Initial UPS contract. A separate contract is
14 required for the assumption by FPL of a portion of JEA's
15 purchase obligation under the 1982 UPS agreement
16 effective upon the first closing.

17
18 Q. Why is FPL assuming JEA's obligations under the 1982
19 agreement?

20 A. Essentially, JEA would like to purchase an ownership
21 interest in Scherer Unit No. 4, but does not currently
22 need additional capacity. In order to allow them to do
23 this, and instead of purchasing a larger share of the
24 unit at an early date, FPL has agreed to assume 150
25 megawatts of JEA's UPS obligation under their 1982 UPS

1 Agreement with Southern Companies as of the date of the
2 first closing, at which time JEA would purchase the
3 equivalent of 150 megawatts of capacity from Scherer Unit
4 No. 4. In return, JEA would provide FPL with firm
5 transmission capacity to accommodate all of FPL's UPS and
6 Scherer Unit No. 4 firm capacity purchases.
7

8 Q. Given that there are many agreements yet to be
9 negotiated, what assurances does FPL have regarding the
10 total costs of Scherer Unit No. 4?

11 A. While final agreements have yet to be concluded, the key
12 parameters affecting the costs of the Unit have been
13 agreed upon by the parties. These include the purchase
14 price, the basis for the fuel supply and operation and
15 maintenance agreements, and the transmission from JEA and
16 Southern. Additionally, the performance parameters of
17 Scherer 4, such as heat rate and availability, are well
18 understood. Therefore, I am confident that the costs of
19 Scherer Unit No. 4 have been identified with sufficient
20 certainty to allow FPL to perform its economic analysis.
21 These key parameters have been reflected in the economic
22 analysis conducted by Mr. S. S. Waters.
23

24 Q. Does this conclude your testimony?

25 A. Yes, it does.

PLANT SCHERER
Plant Description - General

Introduction

Georgia Power Company's (GPC) Plant Scherer is a four-unit, coal fired electric generating plant with each unit nominally rated at 808 MW. Plant Scherer was designed by Southern Company Services, Inc., (SCS) and constructed by GPC using a labor broker contract with Superior Contractors and various specialty subcontractors.

Initially named the Central Georgia Plant, Plant Scherer is located in Monroe County, approximately 17 miles north of Macon, Georgia on a 12,054 acre tract of land. Acquisition of land was begun in 1974 and by the summer of that year land clearing had been started. However, by the end of 1974 GPC was experiencing some financial difficulties which led to the decision to halt construction of the plant. During this interruption of construction, only a small force of GPC construction personnel remained on site. Their work consisted primarily of maintaining equipment and roads, drilling wells and developing a work force plan to be used when construction was resumed. Land acquisition continued during this period, although at a slower rate than originally scheduled.

In early 1975, GPC sold partial interest in several plants, including "Central Georgia," to the Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia, and the City of Dalton, Georgia. This paved the way for the resumption of the construction of the Central Georgia Plant.

In June 1975, the plant was renamed the Robert W. Scherer Electric Generating Plant. Also in late 1975, it was decided the Plant Scherer would be designed, constructed, and initially operated under the project management concept. Under this concept, a team of top management personnel from GPC and SCS was organized as the Project Management Board. In April 1976 a project general manager was appointed and between April and July 1976 the project general manager organized his staff.

In the summer of 1976, construction of Plant Scherer was resumed.

Site Development

Land purchases continued into 1977 and, when completed, a total of 12,054 acres had been acquired. To ensure proper use of project land and that all commitments and obligations to the public were met, GPC appointed a Land Use Task Force in September 1976. This task force was charged with developing an effective land development program and making recommendations for the program's implementation. The program developed by the task force and approved by GPC management would control land use from initial clearing and reservoir development through the completion of construction and the full operation of the plant.

Major Outside Facilities

Lake Juliette is the largest pond on Plant Scherer containing approximately 104,000 acre-feet of water at normal water surface elevation of 435 feet and having a surface area of approximately 3,600 acres. Lake Juliette is much larger than is usually built for a plant of this size. The larger capacity was made necessary because Rum Creek, which feeds it, does not supply enough water to meet plant needs. In addition, the Ocmulgee River, which is used for pond makeup, under drought conditions cannot be used consistently. The large lake size provides insurance against lack of water and, in addition, enhances the environment by providing a stable wildlife preserve.

The river makeup system for Lake Juliette consists of four 40,000 gal/min vertical Allis-Chalmers pumps having a total head of approximately 110 feet. These pumps are installed at the river intake structure located on the Ocmulgee River and pump approximately one mile through the makeup water pipeline to Lake Juliette.

Service water system makeup is taken directly from the pond. The service water pumps are located on a prefabricated concrete structure extending out over the service water pond. The pumps are manufactured by Allis-Chalmers, and one full-capacity, 19,800 gal/min at 335 feet of total discharge head vertical pump is provided for Unit 1. (A full spare serves each pair of units for a total of six pumps.) The service water pumps supply water for cooling tower makeup, plant services, water plant influent, and ash sluice makeup when the ash sluice recycle supply is low.

The water treatment plant produces filtered and demineralized water for the fire protection storage tanks and the filtered water, condensate, and coal dust suppression systems. All necessary chemicals for demineralizer regeneration and clarifier operation are stored in the water treatment plant or located in bulk storage tanks in the yard.

The cooling tower, manufactured by Research-Cotrell, is a concrete hyperbolic natural draft tower approximately 530 feet high and 400 feet in diameter. The tower is designed to produce a cold water temperature of 88°F with 117.5°F hot water and ambient conditions of 79°F wet bulb temperature and 52% relative humidity and a waterflow 268,300 gal/min. The tower is equipped with a full-flow bypass system, deicing provisions, isolation provisions for maintenance and is completely fire-resistant.

Coal is brought to Plant Scherer in unit trains consisting of 65 to 70 bottom dump coal cars at 100 tons each. The coal unloading and conveyor system is manufactured by Roberts Corporation and feeds to the conveying system by means of vibrating feeders located in the tunnel beneath the coal trestle and dumping area. The conveyors are designed to transport the coal either directly to the powerhouse or to the stockout area. A reclaim conveyor can move coal from the stockout area to the power house as required. A tripper type dumping car is used to deposit coal from the conveying system into the nine coal bunkers. The bunkers deliver the coal by gravity to the gravimetric feeders, which meter the coal to the nine mills located on the base slab. The pulverized coal is picked up by the primary air and fed to the burners through a series of coal pipes.

Units 1 and 2 have electrostatic precipitators designed for hot-side operation; manufactured by Western precipitation. Units 3 and 4 have cold-side electrostatic precipitators manufactured by Lodge-Cotrell.

Major Inside Facilities

Units at Plant Scherer are equipped with a Combustion Engineering boiler and a General Electric turbine-generator. The steam generator and turbine generator will operate in a regenerative feedwater heating cycle with throttle steam conditions of 2,400 psig at 1,000°F/1,000°F and at a rated output of 818,000 kW.

The steam generator is a controlled circulation, radiant reheat, divided steam generator capable of producing 5,789,914 lb/hr of 2,50 psig, 1000°F steam at the super-heater outlet and 5,312,595 lb/hr of 555 psig steam at the reheater outlet. It is designed for balance draft operation and is capable of burning many eastern bituminous and western sub-bituminous coals. The furnace is fired through eight 26 inch, tilting, tangential windbox assemblies with pulverized coal fuel and air. Two half capacity forced draft (FD) fans are installed inside the building on the base slab. The FD fan room, in which the FD fans are installed, is equipped with inlet silencers for sound attenuation. Four quarter-capacity induced draft fans are installed in the precipitator yard.

The General Electric turbine is a hydrogen cooled, tandem compound, 3,600 rpm, four-flow, reheat, condensing turbine-generator with 33.5 inch, last-stage buckets. Stop valve steam conditions are 2,400 psig at 1000°F. The steam passes through the three stop valves and four control valves and enters the turbine. At the high pressure stages, the steam is then returned to the reheat section of the boiler. The reheated steam returns to the turbine through the combined reheat stop and intercept valves. Steam then flows into the reheat section, divides and flows out into the crossover pipe and into the low pressure section. After passing through the low pressure section, the steam is exhausted downward into the condenser.

The General Electric generator is a 990,000 kVA, 3,600 rpm, direct connected, three phase, 60 cycle, 25,000 V, conductor cooled synchronous generator rated at 0.90 power factor and 0.50 short circuit ratio at a maximum hydrogen pressure of 75 psig. The generator stator is water cooled, using a deionized water system and a heat exchanger that is cooled by service water. The generator rotor is hydrogen cooled with a gas pressure of 75 psig.

The gas is then cooled by hydrogen coolers using service water. Lubricating oil is supplied from the main turbine oil system, with a separate seal oil system for the hydrogen seals. The main power leads are brought out through the lower frame extension for the connection by means of porcelain insulated high voltage bushings. The generator is excited and controlled by means of an Alterrex excitation system, with the alternator being directly coupled to the generator shaft.

Electrical output from the generator is transformed from the generator voltage of 25 to 500 kV by means of step-up transformers, which are forced oil, forced air cooled and delta-wye connected. Startup station service is provided from a 115 kV high line by means of the start station transformer.

The condenser was manufactured by Foster-Wheeler and is located beneath the turbine low pressure stages on the base slab. It is a twin-shell, series-flow, multipressure condenser with separate inlet connections on each condenser shell for the exhaust steam from a boiler feed pump auxiliary turbine drive. Total effective surface area is 540,000 ft², composed of 42 foot long and one inch outside diameter tubes. A condenser tube cleaning system manufactured by Amertap is installed on each condenser.

Cooling water is recycled through the condenser and cooling tower by means of two Ingersoll-Rand circulating water pumps having a total capacity of 260,000 gal/min at 65 TDH. Circulating water makeup is provided from the service water system.

Three 50% capacity, rotary type mechanical vacuum pumps are provided to remove air leakage and noncondensables from each shell to maintain condenser vacuum.

Condensate is taken from the 30,000 gallon capacity condenser hotwell by Byron-Jackson condensate pumps and pumped forward through the steam packing exhauster, condensate polisher, and the four low pressure heaters to the deaerator. The condensate pumps are the vertical can-type, high head pumps rated at 5,720 gal/min and 1,085 feet total head. Redundancy in the condensate system is accomplished by providing three 50% capacity condensate pumps with the third pump used as a spare. The four full sized Yuba low pressure feedwater heaters are in a single train and are the two pass horizontal, U-type with elliptical heads and admiralty tubes. The heaters are also equipped with condensing and drain cooling sections.

The deaerating feedwater heater is used as the fifth heater and deaerates the feedwater supply to the steam generator. It is a Chicago heater horizontal, open, direct contact type using a combination of spray nozzles and stainless steel trays, as the principal means of deaeration. Feed pump suction is taken from the deaerator.

The primary boiler feed pumps system consists of two half capacity, turbine driven horizontal feed pumps. The Byron-Jackson feed pumps are four-stage, 5,800 rpm pumps of the dual volute design with double suction first stage impellers. The design capacity of each pump is 7,750 gal/min with a net dynamic pumping head of 7,973 feet of water at 382°F. The secondary feed pump system consists of one additional feed pump per unit with an electric motor utilized as the driver. Since an 1800 rpm motor is utilized, a speed increaser gear is required to increase the pump speed, and a hydraulic coupling is used for control. The secondary feed pump system will serve as a startup system and as an online spare in the event of one of the turbine driven feed pumps is out of service. Feedwater from the boiler feed pump system passes through the high pressure heaters before entering the steam generator. The four horsepower heaters are manufactured by Marley and are half-sized feedwater heaters in a dual train. The heaters are the two-pass, horizontal U-type with hemispherical heads, monel tubes, and desuperheating, condensing, and drain cooling sections.

Two auxiliary oil-fired Combustion Engineering boilers were installed on Unit No. 1. These boilers serve as a source of auxiliary steam for chemical

cleaning and for unit startup requirements. Each boiler produce 175,000 lb/hr of 250 psig steam at 520°F.

Projected Heat Rate Data

The following equations represent the projected net and gross Scherer Unit 4.

$$\begin{aligned}\text{Net} &= 773.924/P + 7.216 + .00129P \\ \text{Gross} &= 625.596/P + 7.051 + .00125P\end{aligned}$$

The projected values at minimum/maximum load are as follows:

	<u>Average Heat Rate</u> (MMBTU/MWH)	
	<u>Minimum</u>	<u>Maximum</u>
Net	10.011	9.223
Gross	9.276	8.863



July 30, 1990

Georgia Power Company
Post Office Box 4545
Atlanta, Georgia 30302

Attention: Mr. F.D. Williams

Alabama Power Company, Georgia Power Company,
Gulf Power Company, Mississippi Power Company
and Savannah Electric and Power Company ("Southern
Companies")
c/o Southern Company Services, Inc.
Post Office Box 2625
Birmingham, Alabama 35202

Attention: Mr. R.O. Usry

Jacksonville Electric Authority
21 West Church Street
Jacksonville, Florida 32202-3139

Attention: Mr. Royce Lyles

Re: Letter of Intent regarding (1) Florida Power & Light Company's ("FPL") and Jacksonville Electric Authority's ("JEA") proposed purchases of undivided ownership interests in Unit 4 of Plant Scherer and (2) transmission of the energy associated with FPL's and JEA's proposed ownership interests in Unit 4 of Plant Scherer to their respective interconnection points with Southern Companies.

Gentlemen:

This Letter of Intent, when fully executed in the spaces provided below by authorized representatives of Georgia Power Company ("GPC"), Southern Companies, JEA, and FPL, shall evidence the present mutual intent of the parties relative to the above captioned topics, all as more fully set forth and described below. FPL intends that its proposed purchase of ownership

an FPL Group company

Florida Power & Light Company
Docket No. _____
Witness: G. R. Cepero
Exhibit No. _____ Document No. 2
Page 1 of 18

interests in Unit 4 of Plant Scherer will provide energy and capacity to FPL at a delivered price below FPL's cost of duplication. It is the parties' intent to negotiate promptly to arrive at mutually satisfactory terms and conditions which shall be based on the following principles:

1. FPL and JEA, respectively, will agree to purchase, and GPC will agree to sell, undivided ownership interests in Unit 4 of the Robert W. Scherer Electric Generating Plant, a coal-fired electric generating unit having a demonstrated nominal current net output of 846 MW, located in Monroe County, Georgia ("Unit 4 of Plant Scherer" or "Unit"). The undivided ownership interests which FPL and JEA will be purchasing in Unit 4 of Plant Scherer specifically include commensurate undivided ownership interests in all Plant Scherer common facilities (including land), fuel stock, materials and supplies, governmental permits, engineering records and drawings, operation and maintenance procedure manuals, and existing warranties. FPL and JEA would also be entitled to any emission and other such environmental allowances associated with their respective undivided ownership interests in the Unit as a result of the contemplated amendments to the Clean Air Act or any other legislative or regulatory action.

2. The parties intend that FPL will purchase, and GPC will sell, an aggregate of 76.36 percent of the Unit on the schedule set forth below:

<u>Closing Dates</u>	<u>Ownership Percentages</u>	<u>Payment</u>
January 1, 1991	17.73	\$147,900,000
June 1, 1993	31.44	252,434,000
June 1, 1994	16.55	131,740,000
<u>June 1, 1995</u>	<u>10.64</u>	<u>83,430,000</u>
Total	76.36	\$615,504,000

The payment for the first ownership percentage (scheduled for January 1, 1991) is subject to reduction by the actual depreciation incorporated in the charges paid by FPL in connection with the purchase of Initial UPS (described in paragraph 14) and the purchase of 1991 UPS (described in paragraph 15).

In the event that FPL does not purchase, or purchases less than the amounts shown above, JEA and GPC will meet as soon as practicable to determine whether and to what extent JEA and GPC desire to go forward with the purchases of ownership interests in the Unit set forth in paragraph 3 hereof.

3. The parties intend that JEA will purchase, and GPC will sell, an aggregate of 23.64 percent of the Unit on the schedule set forth below:

<u>Closing Dates</u>	<u>Ownership Percentages</u>	<u>Payment</u>
January 1, 1991	17.73	\$147,900,000
<u>June 1, 1995</u>	<u>5.91</u>	<u>46,350,000</u>
Total	23.64	\$194,250,000

To the extent that JEA does not purchase, or purchases less than the amounts shown above, FPL will be afforded an opportunity to purchase such amounts at such cost and on such Closing Dates if mutually acceptable transmission arrangements can be negotiated among the parties.

4. By virtue of their respective undivided ownership interests, FPL and JEA will be entitled to corresponding percentages of Unit 4 of Plant Scherer's net output (i.e., after deduction of any Plant Scherer station service for which Unit 4 of Plant Scherer is responsible and net of losses to the respective interconnection points with FPL and JEA described below). It is the intent of the parties to negotiate equitable provisions such that, to the extent of FPL's and JEA's

ownership interests, Unit 4 of Plant Scherer would be dispatched to meet their respective requirements.

5. GPC will provide transmission services to transmit the energy associated with FPL's ownership interests in Unit 4 of Plant Scherer to the interconnections with FPL established by the Interchange Contract between Southern Companies and FPL dated October 18, 1979, as amended. GPC will also provide transmission services to transmit the energy associated with JEA's ownership interests in Unit 4 of Plant Scherer to the interconnections with JEA established by the Interchange Contract between Southern Companies and JEA dated February 27, 1981, as amended. It is understood that the provision of such services may require GPC to reach certain agreements with its joint transmission owners on reasonable terms. The rate charged to FPL and JEA for this transmission service will be a formula rate resulting in charges similar to those shown on Attachment A hereto. This rate will recognize GPC's embedded transmission cost, a scheduling fee, a reactive charge, and an interface component.

6. On and after the Closing Dates specified in paragraphs 2 and 3 above, both FPL and JEA will pay for all fuel received under all existing contracts for Plant Scherer based upon their respective aggregate ownership percentage at various points in time multiplied by 25 percent. An estimate of the fuel volumes for which FPL and JEA will assume purchase responsibility is included in Attachment B hereto. FPL and JEA, respectively, will assume ownership of that amount of fuel and will pay for the fuel pursuant to arrangements to be negotiated between the parties. FPL and JEA will be allowed to participate in the procurement decision process for all future fuel supply (including renewals of or amendments to existing contracts). The terms and conditions and extent of such participation will be determined in the definitive agreements. GPC

has assured FPL and JEA that they will be given the opportunity for participation in long-term coal supplies for Plant Scherer pursuant to bids that GPC is currently considering in an attempt to achieve the average cost for fuel referred to below. Subject to the confidentiality agreement referenced in paragraph 19, GPC will, within ten days of the date hereof, provide to FPL copies of such bids, the co-owner agreements related to Plant Scherer, and the existing fuel contracts so that FPL may satisfy itself that the expected average cost of fuel at the Unit will be competitive with long-term market prices for comparable fuel. Subject to the confidentiality agreement referenced in paragraph 19, GPC will, within ten days of the date hereof, make available to JEA the same information at the offices of GPC. If FPL or JEA determines that the expected average cost of fuel will not be competitive with long-term prices for comparable fuel, FPL and JEA shall each have the right to terminate its respective rights and obligations under this Letter of Intent as of the date of such determination. The parties acknowledge that the definitive operating and fuel agreements will contain provisions intended to implement such average cost.

7. Southern Companies will use best reasonable efforts to offer to sell energy necessary for both FPL and JEA to achieve the equivalent of a 90 percent capacity factor from their respective ownership interests in Unit 4 of Plant Scherer. The time period during which such energy will be made available has not yet been established and will be the subject of further discussions, but it will be available until at least December 31, 1994. Energy sold to FPL will be priced at the average of Southern Companies' incremental energy cost and FPL's decremental energy cost, but in no event less than Southern Companies' incremental energy cost. Energy sold to JEA will be priced at the average of Southern Companies' incremental energy cost and JEA's decremental

energy cost, but in no event less than Southern Companies' incremental energy cost. These energy transactions shall take precedence over any economy transactions of Southern Companies.

8. It is understood that transmission limitations may exist prior to June 1993 that could inhibit FPL's ability from time to time to transmit its ownership entitlement from Unit 4 of Plant Scherer or the power purchases described in paragraphs 14 and 15 hereof into its service territory. As a result, GPC will have the use of such energy and will "bank" FPL's energy entitlement. FPL will have the right to receive such "banked" energy when said transmission constraints are eliminated. The "banking" mechanisms will be designed so that the energy withdrawn has reasonably equivalent value (cost- and time-wise) to the energy which was "banked."

9. Southern Companies will utilize best reasonable efforts to negotiate with electric utilities in peninsular Florida for the construction of additional transmission facilities so as to increase the Southern/Florida interface in an effort to make an additional 500 MW of interface capability available to FPL. Provision for expansion of transmission facilities satisfactory to FPL is a condition to FPL's purchase of ownership interests in Unit 4 of Plant Scherer.

10. It is understood that the ownership purchase by FPL and JEA in Unit 4 of Plant Scherer will require amendments to the two Unit Power Sales ("UPS") Agreements between the Southern Companies and FPL dated February 18, 1982 and July 20, 1988, and between Southern Companies and JEA dated May 19, 1982 and August 17, 1988, respectively. Specifically, (i) FPL's and JEA's early options for capacity under the 1988 UPS Agreements will be reduced to reflect the ownership interests purchased from Unit 4 of Plant Scherer and (ii) UPS Sales from

Unit 4 of Plant Scherer under the 1982 UPS Agreements will be replaced by sales from other units covered by said agreements in a mix of quantities such that the aggregate cost of the replacement capacity will be comparable to, but not greater than, the total capacity charges for the replaced capacity. The parties also intend that JEA will assign, and FPL will assume 37.5 percent of JEA's rights and obligations for unit power capacity and energy under the UPS Agreement between JEA and Southern Companies dated May 19, 1982. This assumption will be provided for in the definitive agreements and by appropriate assignment to FPL of JEA's rights and obligations under the May 19, 1982 UPS Agreement between JEA and Southern Companies. Southern Companies will agree to accept such assignment.

11. The parties understand that the definitive agreements contemplated by this Letter of Intent shall include provisions for: (a) purchases and sales of interests in Unit 4 of Plant Scherer and other facilities to be transferred; (b) transmission expansion and service; (c) operation and maintenance of Unit 4 of Plant Scherer and the other facilities; (d) fuel supply; (e) UPS sales from Southern Companies to FPL; and (f) assignment to FPL of certain rights and obligations of JEA under the May 19, 1982 UPS Agreement with Southern Companies. The operation and maintenance agreement, pursuant to which GPC will operate and maintain Unit 4 of Plant Scherer for the benefit of its owners, will include mutually acceptable provisions to reflect, among other things, appropriate operation and maintenance expenses, appropriate administrative and general expenses, and an appropriate operating fee. The parties contemplate that the definitive operation and maintenance agreements will incorporate a "pay for performance" concept.

12. The parties further understand that FPL and JEA have agreed in principle on the terms, conditions, and pricing of transmission services that will provide for the transactions

contemplated by this Letter of Intent, including (i) transmission interface allocation and (ii) transmission service to permit FPL to transmit its ownership output from Unit 4 of Plant Scherer, the output assigned to FPL in connection with the May 19, 1982 UPS agreement between JEA and Southern Companies, and the power purchases described in paragraphs 14 and 15 into FPL's service territory. The transactions contemplated by this Letter of Intent are contingent upon execution of definitive agreements between JEA and FPL to provide for the foregoing.

13. FPL, JEA, and GPC intend that the normal incidents of tenancy in common, including but not limited to the rights to a sale for division, an accounting, and a partition, shall, unless otherwise agreed, have no application to the sales to FPL and JEA of ownership interests in Unit 4 of Plant Scherer and the common facilities (including land), fuel stock, and materials and supplies. It is intended that FPL, JEA, GPC and other co-owners, if any, will have no rights as tenant in common other than those specifically enumerated in the definitive agreements for the purchase and operation of the Unit.

14. By September 1, 1990, FPL will agree to purchase 300 MW of unit power capacity from GPC ("Initial UPS") and execute a contract for filing with the Federal Energy Regulatory Commission by such date. Initial UPS will be at rates and terms and conditions substantially similar to that contained in the UPS Agreement between Southern Companies and FPL dated February 18, 1982, as amended, except that transmission charges shall be determined in a manner similar to that provided for in paragraph 5. Initial UPS shall have a term of November 1, 1990 to December 31, 1990 and will be structured so that 248 MW of net dependable capacity is dedicated to the sale from Unit 4 of Plant Scherer and 52 MW from Unit 3 of Plant Scherer. FPL and JEA have agreed in principle on the terms, conditions, and pricing of transmission

services necessary to allow this sale to commence on November 1, 1990; however, the sale of Initial UPS is contingent upon execution of a definitive transmission agreement between FPL and JEA by September 15, 1990. The contract for Initial UPS is to be executed by FPL by September 1, 1990 and will otherwise only be contingent upon FPL's determination (to be completed by September 15, 1990) that it is feasible to obtain the expected average fuel cost referred to in paragraph 6. It is understood that FPL will be responsible for all transmission charges or fees to JEA. In the event the contract for Initial UPS is not executed by September 1, 1990 or FPL terminates such contract on or before September 15, 1990, this Letter of Intent shall immediately terminate on such dates. The contract for Initial UPS shall otherwise survive the termination of this Letter of Intent or the failure of the parties to execute definitive agreements for the sale and purchase of ownership interests in Unit 4 of Plant Scherer.

15. Except for the initial UPS described in paragraph 14, the parties recognize that the transactions contemplated by this Letter of Intent will be contingent on the occurrence of the following events: (i) the provisions described in paragraphs 10, 11, and 12 above are reached on terms expressly determined to be satisfactory to the respective boards of directors of GPC and FPL, respectively, and, in the case of JEA, the Jacksonville Electric Authority Board and the City Council of the City of Jacksonville, Florida; (ii) execution of the definitive agreements on or before December 31, 1990; and (iii) all regulatory consents and approvals, including those from the Federal Energy Regulatory Commission, the Securities and Exchange Commission, and the Florida Public Service Commission, have been received. In the event the parties are unable to obtain necessary regulatory approvals and consents by December 31, 1990 in order to allow the first closing of a sale of an ownership interest in the Unit by January 1, 1991, the definitive agreements will contain provisions which commit GPC to sell and FPL to purchase 300 MW of

unit power capacity beginning January 1, 1991 and continuing through June 30, 1991 ("1991 UPS"). The composition and pricing of the 1991 UPS will be identical to the Initial UPS described in paragraph 14. Subject to the fifth succeeding sentence below, FPL will have the sole option to terminate the 1991 UPS before June 30, 1991 if any conditions precedent have not been satisfied or waived on the later of the following dates: (i) a date 90 days after the execution of the definitive agreements or (ii) a date 60 days after FPL receives an order of approval or consent of the Florida Public Service Commission. In the event of an adverse decision (by public vote or order) by the Florida Public Service Commission, FPL shall have the right to terminate the 1991 UPS upon 30 days written notice. In the event of disapproval by the Securities and Exchange Commission or the Federal Energy Regulatory Commission, FPL shall have the right to terminate the 1991 UPS immediately. In the event that the Federal Energy Regulatory Commission's or the Securities and Exchange Commission's approval has not been received by June 30, 1991, the parties may by mutual agreement continue the 1991 UPS past June 30, 1991 for a reasonable period and extend the closing date appropriately. The terms and conditions of such extension are subject to negotiation for inclusion in the definitive agreements. In all events, the 1991 UPS will terminate upon the closing of the first sale of an ownership interest in the Unit.

Further, the parties recognize and understand that Units 1, 2, and 3 of Plant Scherer, the Plant Scherer common facilities, and the Plant Scherer coal stockpile are currently co-owned by GPC and other co-owners and are subject to existing ownership and operating agreements among GPC and the other co-owners which establish rights and obligations of GPC and other co-owners. The parties will strive to negotiate agreements which are consistent with such existing agreements. If the agreements to be negotiated between GPC, FPL, and JEA, respectively relating to FPL's and JEA's purchase of interests in Unit 4 of Plant Scherer are inconsistent with

such existing agreements, GPC will use best reasonable efforts to obtain mutually satisfactory resolution with the co-owners.

16. FPL shall have the right to assign all or a part of its rights under this Letter of Intent to a subsidiary or affiliate provided that FPL provides adequate assurance to GPC that GPC will not be adversely affected by such assignment and that the assignee is, in GPC's judgment, financially responsible. In any event, GPC must give prior consent to the assignment in writing; provided, however, that such consent will not be unreasonably withheld.

17. It is understood that during the term of this Letter of Intent GPC will not negotiate with any party other than FPL and JEA concerning the purchase and sale of Unit 4 of Plant Scherer. After December 31, 1990, GPC will have the right to negotiate with other parties concerning the sale of the Unit subject to FPL's and JEA's rights established in the definitive agreements.

18. The parties agree that no public or other announcement concerning the transactions contemplated hereby shall be made except after mutual consultation and consent, provided, however, that (i) each party shall be permitted to make such disclosures to the public or to such governmental agencies as its counsel may deem reasonably necessary to comply with applicable laws or to respond to regulatory concerns; and (ii) each party may make such disclosures as may be necessary in the attempt to reach agreement with any party with whom an agreement is contemplated by this Letter of Intent.

19. During the negotiation of the provisions described in paragraph 11 above, FPL and JEA shall have the right (upon execution of a confidentiality agreement in a form and substance

acceptable to GPC) to review all accounting records, engineering and maintenance reports, all existing co-owner agreements related to Plant Scherer, and other operating and environmental data and other agreements related to Plant Scherer, to perform physical inspections and audits of the Plant site, and to interview Plant management.

20. It is understood that GPC will be solely responsible for all Federal and Georgia state tax consequences incurred on the Closing Dates of the sale of Unit 4 of Plant Scherer, including, but not limited to, Federal and Georgia state income taxes and Georgia state sales taxes and Georgia state transfer tax, if any. GPC will be responsible for all recording fees and filing fees, if any. FPL and JEA will use Georgia counsel, acceptable to GPC, for title and recording matters. As part of each closing GPC will deliver to FPL and JEA a limited warranty deed and bill of sale evidencing the transfer to FPL and JEA of insurable fee simple title to their undivided ownership interests in Plant Scherer.

21. Except for the right to review certain agreements contained in paragraph 6 and as otherwise provided in paragraphs 17, 18, and 19 hereof, this Letter of Intent is not intended to constitute an agreement which will be legally binding on any of the parties and is not intended to be relied upon by the parties as constituting a final agreement. This Letter of Intent is written with the understanding that, except for the right to review certain agreements contained in paragraph 6 and as otherwise provided in paragraphs 17, 18, and 19, no party will be bound by any of its terms until negotiations have been concluded and definitive agreements have been executed covering all of the foregoing matters and any additional matters the parties deem appropriate. This Letter of Intent is intended to be an expression of the parties' respective intentions and of

the parties' willingness to continue to negotiate in a good faith effort to reach definitive agreements.

22. GPC, JEA, and FPL will utilize best reasonable efforts to obtain on a timely basis all necessary and contemplated regulatory approvals in order to consummate the transactions contemplated in this Letter of Intent. Upon receipt of all necessary and contemplated regulatory approvals and satisfaction of all conditions precedent, the parties will take actions, as soon as reasonably practicable, to close the first sale of ownership interests provided for in paragraphs 2 and 3 hereof.

23. In the definitive agreements, GPC will grant to FPL and JEA for a term ending December 31, 1994 a contemporaneous right of first refusal on any future offers of sale of an undivided ownership interest in Unit 3 of Plant Scherer (other than offers to other affiliates and subsidiaries of The Southern Company or third parties located within the State of Georgia). JEA's contemporaneous right of first refusal will apply to 50 percent of the ownership interests offered for sale from Unit 3 of Plant Scherer until JEA has obtained a right to a maximum of 50 MW of ownership interest, after which JEA's right of first refusal will cease.

24. Unless otherwise provided herein, this Letter of Intent shall terminate on December 31, 1990.

July 30, 1990
Page 14

If the foregoing correctly reflects our mutual understanding, please execute the enclosed copy of this Letter of Intent.

Very truly yours,

FLORIDA POWER & LIGHT COMPANY

By: [Signature]
Executive Vice President

Date: 7-31, 1990

AGREED TO:

GEORGIA POWER COMPANY

By: [Signature]

Date: July 31, 1990

SOUTHERN COMPANY SERVICES, INC.
as Agent for the Southern Companies

By: [Signature]

Date: July 31, 1990

JACKSONVILLE ELECTRIC AUTHORITY

By: [Signature]
Managing Director

Date: 7-31-90, 1990

APPROVED AS TO FORM:

By: [Signature]

Date: _____, 1990

**PROJECTED TRANSMISSION RATES FOR OWNERSHIP INTEREST
IN SCHERER 4**

Year	GPC Embedded Transmission Estimates (1) \$/kw-mo	Reactive Charge \$/kw-mo	Scheduling Charge (2) \$/kw-mo	Interface Improvement (3) \$/kw-mo	Total Estimated Transmission Cost \$/kw-mo
1991	1.10	0.25	0.07	0.00	1.42
1992	1.11	0.24	0.07	0.00	1.42
1993	1.15	0.23	0.07	0.00	1.45
1994	1.13	0.23	0.07	0.00	1.43
1995	1.22	0.22	0.07	0.29	1.80
1996	1.27	0.22	0.07	0.28	1.84
1997	1.34	0.21	0.07	0.27	1.89
1998	1.37	0.21	0.07	0.27	1.92
1999	1.41	0.20	0.07	0.26	1.94
2000	1.47	0.20	0.07	0.25	1.99
2001	1.55	0.20	0.07	0.24	2.06
2002	1.61	0.19	0.07	0.24	2.11
2003	1.66	0.19	0.07	0.23	2.15
2004	1.72	0.18	0.07	0.22	2.19
2005	1.78	0.18	0.07	0.22	2.25
2006	1.83	0.18	0.07	0.21	2.29
2007	1.89	0.18	0.07	0.20	2.34
2008	1.95	0.18	0.07	0.20	2.40
2009	1.99	0.18	0.07	0.19	2.43
2010	2.15	0.18	0.07	0.19	2.59
2011	2.28	0.18	0.07	0.18	2.71
2012	2.34	0.18	0.07	0.18	2.77
2013	2.40	0.18	0.07	0.17	2.82
2014	2.40	0.18	0.07	0.17	2.82
2015	2.50	0.19	0.07	0.16	2.92
2016	2.60	0.19	0.07	0.16	3.02
2017	2.71	0.19	0.07	0.16	3.13
2018	2.82	0.19	0.07	0.16	3.24
2019	2.93	0.20	0.07	0.16	3.36
2020	3.05	0.20	0.07	0.15	3.47
2021	3.17	0.20	0.07	0.15	3.59
2022	3.30	0.21	0.07	0.15	3.73
2023	3.43	0.21	0.07	0.15	3.86
2024	3.57	0.22	0.07	0.15	4.01

NOTES:

- (1) Embedded estimates reflect costs at the Scherer bus and do not provide for loss compensation to the Southern Companies/Florida interface.
- (2) Based on levelized costs for expenses charged to Account 556 - System Control and Load Dispatch.
- (3) Figures reflect estimated costs for a 1500 MW interface improvement.

**PROJECTED PLANT SCHERER COAL VOLUMES
FOR WHICH FPL AND JEA WILL ASSUME RESPONSIBILITY**

Year		FPL Projected Coal Volumes	JEA Projected Coal Volumes
		(1) (2) Tons	(1) (2) Tons
1991		89,982	99,982
1992		112,145	112,145
1993	Jan-May	46,727	46,727
	Jun-Dec	181,426	65,418
1994	Jan-May	129,590	46,727
	Jun-Dec	242,483	65,418
1995	Jan-May	173,202	46,727
	Jun-Dec	281,734	87,224
1996		482,973	149,527
1997		379,092	117,366
1998		286,348	88,652
1999		286,348	88,652
2000		286,348	88,652
2001		286,348	88,652
2002		286,348	88,652
2003		286,348	88,652
2004		286,348	88,652
2005		286,348	88,652
2006		286,348	88,652
2007		286,348	88,652
2008		286,348	88,652

NOTES:

- (1) Volumes for 1991 assume a January 1, 1991 closing date.
- (2) One of the coal contracts has a 5 year term that can begin from January 1, 1992 through January 1, 1994, to be determined by GPC. For purposes of this projection it was assumed to begin on January 1, 1992.



July 30, 1990

Jacksonville Electric Authority
P. O. Box 53015
Jacksonville, FL 32202

Re: (1) Transmission Service by Jacksonville Electric Authority ("JEA") to Florida Power & Light Company ("FPL") in connection with the proposed purchases of undivided ownership interests in Unit 4 of Plant Scherer; (2) allocation of the Florida-Georgia Transmission Interface; and (3) assumption by FPL of a portion of JEA Obligations under the JEA-Southern Company Services, Inc. 1982 UPS Agreement

Gentlemen:

This Letter of Intent, when fully executed in the spaces provided below by authorized representatives of FPL and JEA, shall evidence the present mutual intent of the parties relative to the above-captioned topics, all as more fully set forth and described below. It is the general intent of the Parties that FPL will assume responsibility for approximately 150 MW of JEA UPS Obligations (as hereinafter defined) starting in 1991 to enable JEA to immediately acquire an equivalent 150 MW ownership share in Unit 4 of Plant Scherer. In consideration of the above, JEA will provide FPL the necessary firm transmission service to fully accommodate purchases (i) under the Southern Company Services, Inc. ("SCS") - FPL 1982 UPS Agreement ("1982 UPS"); (ii) of the JEA UPS Obligations (as hereinafter defined); and (iii) of 150 MW of the Initial UPS and the 1991 UPS (as such terms are defined in the Letter of Intent, dated as of July 27, 1990 (the "Scherer 4 Letter of Intent") among Georgia Power Corporation ("GPC"), SCS, JEA and FPL). The rate for (i) above shall be \$0.79/kW-month which is the effective rate under the Transmission Line Capacity Rights Agreement between FPL and JEA, dated as of January 1, 1985 (the "Capacity Agreement" and such rate, the "Existing Transmission Service Rate"). The rate for (ii) and (iii) above shall be

an FPL Group company

Florida Power & Light Company
Docket No. _____
Witness: G. R. Cepero
Exhibit No. _____ Document No. 3
Page 1 of 7

\$0.54/kW-month (hereinafter referred to as the "New Transmission Service Rate"). Furthermore, JEA will provide FPL the necessary firm transmission service to fully accommodate (i) purchases under the SCS - FPL 1988 UPS Agreement ("1988 FPL UPS") (excluding FPL early option); (ii) 150 MW of Initial UPS and 1991 UPS; and (iii) deliveries of power pursuant to FPL's ownership interest of Unit 4 of Plant Scherer ("Scherer Unit 4") all at the rate of \$1.53/kW-month (hereinafter referred to as the "Firm Transmission Service Rate"). It is the parties' intent to negotiate promptly to arrive at mutually satisfactory terms and conditions which shall be based on the following principles:

1. Effective upon approval of the Parties, the Capacity Agreement will be amended to increase the amount of firm transmission service by 45 MW (from 2025 MW to 2070 MW) through December 31, 1992. The rate for this additional 45 MW of transmission service will be the Existing Transmission Service Price. In addition, the expiration date of the Capacity Agreement will be extended from December 31, 1992 through May 31, 1993 and the amount of firm transmission service provided by JEA during such extension period will be adjusted to permit FPL to receive approximately 1717 MW of deliveries under the 1982 UPS (amounting to approximately 125 MW of firm transmission service as more fully detailed in Table I attached hereto) at the Existing Transmission Service Price.

2. Contemporaneously with the effectiveness of the agreement for Initial UPS but not sooner than November 1, 1990, JEA will provide FPL with an additional 300 MW of firm transmission service to accommodate deliveries of Initial UPS and 1991 UPS. The rate for 150 MW of this transmission

service will be at the Firm Transmission Service Price and for the remaining 150 MW at the New Transmission Service Price.

3. The arrangements for 300 MW of additional transmission service described in paragraph 2 hereof will continue so long as FPL is purchasing capacity under Initial UPS or 1991 UPS. It is understood that any transmission service for Initial UPS or 1991 UPS beyond June 30, 1991 will require the separate mutual agreement of the parties and will extend only for a reasonable period.

4. At the first Closing (the "Closing") under the Scherer 4 Purchase Agreement to be entered into as contemplated in the Scherer 4 Letter of Intent, FPL and JEA will each purchase an undivided 17.73% ownership interest in Scherer Unit 4. Contemporaneous with such purchases FPL will assume 150 MW of JEA's power purchase obligations ("JEA UPS Obligations") under the Unit Power Sale Agreement dated May 19, 1982, between JEA and Southern Company Services, Inc. (the "JEA 1982 UPS Agreement"), (FPL's assumption to be reduced commencing on January 1, 1993 until May 31, 1995) so that the capacity which FPL is obligated to purchase will equal the product of (a) the total capacity available under JEA 1982 UPS Agreement multiplied by (b) a fraction the numerator of which is 150 and the denominator of which is 400. Table 1, attached hereto, more fully sets forth the amount of JEA UPS Obligations assumed by FPL and as so reduced. The rate payable by FPL for such capacity shall be equal to the effective rate payable by JEA for JEA UPS Obligations.

5. Effective upon the Closing and as set forth in Table 1 attached hereto:

(a) JEA will provide to FPL, at the New Transmission Service Price, up to 150 MW of firm transmission service to accommodate the JEA UPS Obligations assumed by FPL. This transmission service will be provided for the amount and term described in paragraph 4 hereof.

(b) JEA will also provide to FPL, at the Firm Transmission Service Price, up to 160 MW of firm transmission service to accommodate FPL's ownership interest in Scherer Unit 4 and 1988 FPL UPS obligations. This transmission service will be provided until FPL has sufficient transmission capacity to accommodate all firm deliveries from Southern Company and Scherer Unit 4.

6. FPL and JEA agree that, based on a total interface capacity of 3,200 MW with 416 MW allocation to Florida Power Corporation, FPL is entitled to 1492 MW and JEA is entitled 1292 MW. Additionally, FPL and JEA agree that the next increase of 100 MW in Total Base Import Capability (as defined in Section 1.15 of the Florida/Southern Transmission Interface Allocation Agreement (the "Interface Agreement") dated May 14, 1990) which is assigned to JOP (as defined in the Interface Agreement) will be allocated to FPL if FPL can reasonably demonstrate that FPL has taken actions causing such increase; provided, however, that if FPL cannot so demonstrate then FPL shall receive 80 MW of such increase and JEA shall receive 20 MW. The parties agree that future increases in import capacity beyond the 100 MW contemplated above will be allocated to the party responsible for such increases. The parties agree that the definitive agreements shall address the circumstance where JOP receives an assignment under the Interface Agreement and FPL and JEA cannot reasonably and in good faith allocate

such assignment between themselves. Furthermore, FPL and JEA agree to enter into and amend any agreements necessary to accomplish the intent of this paragraph 6.

7. The Parties acknowledge that the transmission amounts set forth herein and in Table I attached hereto are nominal amounts based upon currently available information and as such may require adjustment for variations due to actual system conditions or updated planning information.

8. FPL and JEA agree that no public or other announcement concerning the transactions contemplated hereby shall be made except after mutual consultation and consent, provided, however, that (i) each party shall be permitted to make such disclosures to the public or to such governmental agencies as its counsel may deem reasonably necessary to comply with applicable laws or to respond to regulatory concerns; and (ii) each party may make such disclosures as may be necessary in the attempt to reach agreement with any party with whom an agreement is contemplated by this Letter of Intent.

9. Except as provided in paragraph 8 hereof, this Letter is not intended to constitute an agreement which will be legally binding on any of the parties and is not intended to be relied upon by the parties as constituting a final agreement. This Letter is written with the understanding that, except as provided in paragraph 8, no party will be bound by any of its terms until negotiations have been concluded and definitive agreements have been executed covering all of the foregoing matters and any additional matters the parties deem appropriate. This Letter is intended to be an expression of our

respective intentions and of our willingness to continue to negotiate in a good faith effort to reach definitive agreements.

10. Unless otherwise provided herein, this Letter of Intent shall terminate on December 31, 1990.

If the foregoing correctly reflects our mutually understanding, please execute the enclosed copy of this Letter of Intent.

Very truly yours,

FLORIDA POWER & LIGHT COMPANY

By: R. L. Taylor 7/31/90

Agreed to as of the date first above written:

JACKSONVILLE ELECTRIC AUTHORITY

By: Roger Lyle 7/31/90

APPROVED AS TO FORM:

By: Edward C. Tannen

TABLE I

(Note: This Table and the figures below are for illustration and explanation purposes only.)

**SUMMARY OF PROJECTED TRANSMISSION SERVICE
REQUIREMENTS AND RATES**

DATE	1) FPL/JEA INTERFACE CAPACITY (MW)	2) FPL 1982 UPS (MW)	3) TRANSMISSION SERVICE TO FPL AT EXISTING RATES (MW)	4) JEA 1982 UPS (MW)	5) TRANSMISSION SERVICE TO FPL AT NEW RATES (MW)	6) 1988 FPL UPS (MW)	SCHERER #4 OWNERSHIP (MW)	7) TRANSMISSION SERVICE TO FPL AT FIRM RATES (MW)	TOTAL DELIVERIES FPL (MW)
11/1/90- 12/31/92	1492/1292	2070	45	8) 150	150	-	9) 150	150	2370
1/1/93- 5/31/93	1592/1292	1717	125	125	125	-	150	150	1992
6/1/93- 5/31/94	1592/1292	1035		75	75	300	416	159	1826
6/1/94- 5/31/95	1592/1292	517		38	38	450	556		1561
6/1/95-	1592/1292	0		0		900	646		1546

- 1) The above figures are based on the following assumptions; FPL interface capacity is currently 1492 MW and will increase to 1592 MW by or before 1/1/93 as contemplated by Paragraph 6.
- 2) Capacity sold to FPL under the 1982 FPL - Southern UPS Agreement ("1982 UPS").
- 3) "Existing" is the Existing Transmission Service Price (\$0.79/kW-month).
- 4) Capacity assumed by FPL from JEA's 1982 JEA - Southern UPS Agreement ("JEA UPS Obligations").
- 5) "New" is the New Transmission Service Price (\$0.54/kW-month).
- 6) Capacity sold to FPL under the 1988 FPL - Southern UPS Agreement ("1988 FPL UPS").
- 7) "Firm" is the Firm Transmission Service Price (\$1.53/kW-month).
- 8) For 11/1/90 to Closing, FPL will be receiving Initial UPS or 1991 UPS in lieu of JEA 1982 UPS.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF ROBERTO R. DENIS

DOCKET NO. _____

SEPTEMBER 28, 1990

1 Q. Please state your name and business address.

2 A. My name is Roberto R. Denis, and my business address is
3 9250 West Flagler Street, Miami, Florida, 33174.

4

5 Q. Who is your employer and what position do you hold?

6 A. I am employed by Florida Power & Light Company (FPL) as
7 Director of System Planning.

8

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

11 A. I received a Bachelor of Science degree in Electrical
12 Engineering from Georgia Institute of Technology in 1972.
13 In 1976, I completed an FPL sponsored course in the field
14 of nuclear power. I have since attended numerous courses
15 and seminars at Auburn University, General Electric
16 Company, Ohio State University, and industry

1 associations.

2
3 I am a registered Professional Engineer in the State of
4 Florida, and a member of the Florida Engineering Society
5 and the Institute of Electrical and Electronic Engineers.
6 I also represent FPL on the System Planning Committee of
7 the Edison Electric Institute and on the System Planning
8 Committee of the Florida Electric Power Coordinating
9 Group.

10
11 Upon graduation in 1972, I was employed by FPL as a
12 distribution engineer in FPL's Southeastern Division. In
13 1976, I joined the System Planning Department, where I
14 was promoted to the position of Supervisor of Generation
15 Planning in 1980. In 1982, FPL formed the Load
16 Management and Customer Generation Department, at which
17 time I was promoted to the position of Manager of that
18 department. In 1985, I joined the Power Supply
19 Department as the Manager of Contracts and
20 Administration. In January of 1989, I was promoted to
21 Director of System Planning.

22
23 In my present position, I am responsible for the
24 evaluation of the Company's future need for power supply
25 and transmission facilities and for the formulation of

1 plans to satisfy such needs.

2

3 Q. What is the purpose of your testimony?

4 A. The purpose of my testimony is to discuss the results of
5 the "Request for Power Supply Proposals" (RFP) FPL issued
6 in July 1989.

7

8 Q. Have you prepared an exhibit in connection with your
9 testimony?

10 A. Yes. It consists of 3 documents.

11 Document No. 1 is a capacity RFP summary listing of
12 facilities by name, location, capacity
13 (MW), type and technology.

14 Document No. 2 is the capacity RFP evaluation criteria.

15 Document No. 3 is the relative ranking of the thirteen
16 highest scoring proposals.

17

18 Q. Why did FPL issue an RFP?

19 A. In FPL's 1988 capacity expansion planning study it was
20 determined that a significant amount of additional
21 resources were needed by FPL through 1997. These
22 resources were required to provide an adequate and
23 reliable level of service.

24

25 Among the alternatives available to satisfy the needed

1 additional resources was the construction of generation
2 facilities by FPL. The decision to issue the RFP was an
3 effort to see if a better alternative was available to
4 FPL's own construction.
5

6 Q. What amount of capacity and in what timeframe did FPL
7 solicit through the RFP ?

8 A. Proposals for supply of up to 800 MW of capacity were
9 solicited. Facilities of any MW size were acceptable.
10 As stated previously, it was FPL's objective to find
11 better alternatives to its own construction.
12 Specifically, alternatives for the construction it
13 planned for 1996 were requested. However, proposals in
14 which capacity became available during the period between
15 1994 and 1997 were accepted to provide additional
16 flexibility in satisfying FPL's needs.
17

18 Q. What type of suppliers did FPL invite to respond?

19 A. The solicitation invited responses from all types of
20 electric power suppliers, including independent power
21 producers, PURPA Qualifying Facilities (QFs) and other
22 utilities. Respondents had to propose facilities which
23 were based on proven technologies and would be capable of
24 using coal or an alternate primary fuel other than oil.
25

1 Q. Did FPL intend to supplant its obligation to purchase
2 from QF's under the Commission's rules by permitting them
3 to participate in its RFP process?

4 A. No. In fact the RFP provided the opportunity to
5 supplement the amount of QF capacity FPL expected to
6 become available under the process established by the
7 Commission's rules.

8
9 FPL's capacity expansion planning study which determined
10 its need to construct additional facilities presupposed
11 that almost 1100 MW QF capacity would become available by
12 1997. At the time of the issuance of the RFP only about
13 one-half of this capacity was under contract with the
14 remainder being held open to be satisfied by QFs. FPL
15 has not attempted to meet this QF portion not under
16 contract with other alternatives. Therefore, in addition
17 to the QF capacity FPL included in its planning study,
18 the 800 MW solicited in the RFP was available for QFs to
19 supply.

20
21 Q. Where could the facilities proposed through the RFP be
22 located?

23 A. The RFP was open to facilities located either in Florida
24 or out-of-state. However, respondents proposing
25 facilities located outside of FPL's service territory

1 were responsible for securing the delivery of their
2 capacity to the FPL system.

3

4 Q. How many proposals did FPL receive?

5 A. Thirty four proposals totaling 10,793 MW from 24
6 different respondents were received.

7

8 Q. Please summarize the proposals.

9 A. A listing of the proposals indicating size in MW, type,
10 technology and location is provided in my Document No. 1.
11 Of the proposals listed, two were from utilities, 18 were
12 QF's and 14 independent power producers. All but three
13 of the proposals listed were located in Florida.

14

15 Q. What were the major steps in the RFP evaluation process?

16 A. The major steps in the evaluation process were as
17 follows:

- 18 • Initial screening to eliminate proposals that
19 failed to meet the minimum requirements stated in
20 the RFP.
- 21 • Economic screening of the remaining proposals.
- 22 • Detailed evaluation of proposals to identify a
23 negotiation award group.
- 24 • Negotiations with the selected respondent(s) to
25 reach contractual agreements.

1 Q. Please describe those steps in more detail.

2 A. Proposals were first evaluated to determine whether they
3 met certain requirements and minimum conditions which
4 were specified in the RFP. These included items related
5 to the construction plan and schedule, siting, fuel, and
6 response completeness requirements.

7
8 Those proposals meeting the minimum conditions and
9 requirements were subjected to an economic screening
10 step. The purpose of this screening step was to
11 determine if the number of proposals which had to be
12 evaluated in detail could be reduced.

13
14 In the detailed evaluation step, proposals were evaluated
15 using price and non-price factors. These factors were
16 used to select the best overall proposal and are listed
17 in my Document No. 2. The detailed methodology used in
18 the evaluation process is proprietary to FPL and has not
19 been disclosed to the public. The factor relating to
20 the facility location is of particular importance to the
21 ultimate selection made by FPL.

22
23 Q. How did you treat facility location in the RFP process?

24 A. Location was evaluated as an element of price as well as
25 a non-price factor. Transmission penalties were included

1 in the price evaluation with the most severe penalties
2 applied to those facilities located outside the State of
3 Florida and no penalties to facilities located near the
4 load center in South Florida. We also evaluated location
5 with regard to the transmission losses the facilities
6 would incur, their impact on transfer capability, and the
7 overall reliability of FPL's system.

8

9 Q. Why was special treatment given to the facility location?

10 A. It was necessary to pay particular attention to the
11 location of facilities because of FPL's load center being
12 situated in the southeast portion of the Florida
13 peninsula. This fact makes the location of generation
14 sources more dependent on FPL's transmission system.

15

16 Q. How did the proposals perform in the evaluation process?

17 A. One proposal failed the initial screening step. Thirty
18 three proposals were evaluated in detail. My Document
19 No. 3 shows the relative scores of the top thirteen
20 proposals.

21

22 Q. What is the current status of the RFP process?

23 A. Three of the four major steps of the evaluation process
24 have now been completed. The proposal submitted by the
25 Southern Company (Southern) ranked the highest. This

1 proposal was for the sale of capacity from its Scherer
2 Unit No. 4. Southern was notified accordingly. In
3 addition, a group of facilities was retained in the event
4 a final agreement is not reached with Southern.
5 Additional information has been requested from these
6 facilities in order to perform further evaluations. All
7 other respondents have been notified of FPL's selection.
8

9 Q. Are you satisfied with the results of the RFP process

10 A. Yes. Proposals were received and evaluated reflecting a
11 variety of technologies, locations, fuel sources and
12 types of facilities. Although the RFP process is not yet
13 completed, in my opinion it identified available capacity
14 alternatives.

15

16 Q. Does this conclude your testimony?

17 A. Yes, it does.

CAPACITY RFP SUMMARY

<u>FACILITY NAME</u>	<u>SIZE (MW)</u>	<u>TYPE</u>	<u>TECHNOLOGY</u>	<u>LOCATION</u>
HADSON FLORIDA 1 LP	216	QF	COMBINED CYCLE	BROWARD COUNTY
HADSON FLORIDA 2 LP	165	QF	PULVERIZED COAL	BROWARD COUNTY
HADSON FLORIDA 3 LP	216	QF	COMBINED CYCLE	DADE COUNTY
HADSON FLORIDA 4 LP	26.8	QF	COMBINED CYCLE	DADE COUNTY
PAHOKEE POWER FACILITY	181.5	IPP	PULVERIZED COAL	PALM BEACH COUNTY
FT. MYERS POWER FACILITY	181.5	IPP	PULVERIZED COAL	LEE COUNTY
CATAWABA NUCLEAR STATION	100	UTL	NUCLEAR	SOUTH CAROLINA
SCHERER UNIT NO. 4	848	UTL	PULVERIZED COAL	GEORGIA
ENSERCH MIAMI P. L.	130	QF	FLUIDIZED BED	DADE COUNTY
ENSERCH JACKSONVILLE P.L.	184	QF	COMBINED CYCLE	DUVAL COUNTY
INDECK-FROSTPROOF ENERGY CENTER	105	QF	COMBINED CYCLE	POLK COUNTY
POMPANO BEACH ENERGY P. L.	80	QF	PULVERIZED COAL	BROWARD COUNTY
SEI & ERL ARCADIA LP	218	QF	FLUIDIZED BED	DESOTO COUNTY
SEI & ERL DELAND LP	218	QF	FLUIDIZED BED	VOLUSIA COUNTY
HENDRY POWER STATION	439	IPP	PULVERIZED COAL	HENDRY COUNTY
VILLAGE POWER PROJECT	268	IPP	COMBINED CYCLE	DADE COUNTY
LIBERTY POWER PROJECT	156	QF	FLUIDIZED BED	PALM BEACH COUNTY
CARLTON POWER FACILITY	376	IPP	PULVERIZED COAL	HARDEE-DESOTO C. LINE
WESTLAKE POWER FACILITY	376	IPP	PULVERIZED COAL	DUVAL COUNTY
CLEARWATER ENERGY COGEN	400	QF	PULVERIZED COAL	MARTIN COUNTY
BEELINE POWER STATION	175	IPP	PULVERIZED COAL	PALM BEACH COUNTY
CYPRESS ENERGY PROJECT	816	IPP	PULVERIZED COAL	OKEECHOBEE COUNTY
DADE COGEN	220	QF	FLUIDIZED BED	DADE COUNTY
HENDRY COGENERATION	124	QF	PULVERIZED COAL	HENDRY COUNTY
BRADLEY JUNCTION ELECTRIC GEN. STATION	766	IPP	PULVERIZED COAL	POLK COUNTY
VALENCIA POWER STATION	412	IPP	ADVANCED COMBINED CYCLE	HARDEE COUNTY
TAYLOR CREEK STATION	724	IPP	PULVERIZED COAL	OKEECHOBEE COUNTY
FORT OGDEN STATION	724	IPP	PULVERIZED COAL	DESOTO COUNTY
FALCON PENINSULAR POWER PLANT	425	QF	ADVANCED COMBINED CYCLE	DUVAL COUNTY
BELLEFONTE	800	IPP	COMBINED CYCLE	ALABAMA
PANDA-CELOTEX	207	QF	COMBINED CYCLE	DUVAL COUNTY
PANDA-GOLD KIST	207	QF	COMBINED CYCLE	SWANNEE COUNTY
EMPIRE III	181	IPP	PULVERIZED COAL	DADE COUNTY
EMPIRE IV	127	QF	PULVERIZED COAL	DADE COUNTY

NOTES:

QF STANDS FOR QUALIFYING FACILITY

IPP STANDS FOR INDEPENDENT POWER PRODUCER

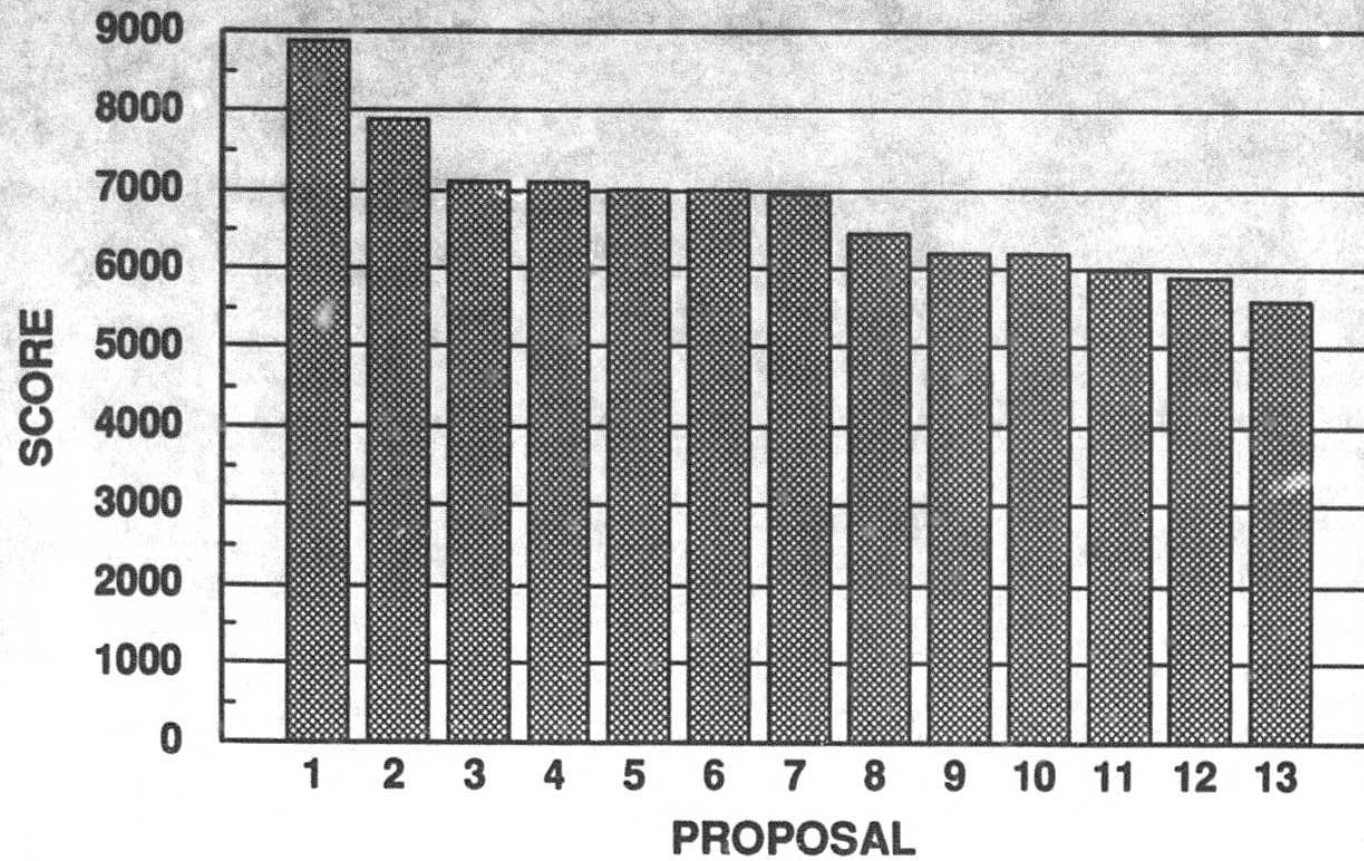
UTL STANDS FOR UTILITY

CAPACITY RFP PROPOSAL EVALUATION CRITERIA

1. PRICE AND COST TO FPL
2. LOCATION
3. PLANNING AND SCHEDULE FLEXIBILITY
4. FUEL DIVERSITY AND PRICE RISKS
5. SECURITY OF FUEL SUPPLY
6. POWER QUALITY AND RELIABILITY
7. DISPATCHABILITY
8. REACTIVE CAPABILITY AND CONTROL
9. CONTRACT TERM
10. MAINTENANCE OUTAGE SCHEDULING
11. COMPLETION SECURITY
12. SECURITY FOR PAYMENT IN EXCESS OF VALUE
13. FINANCIAL VIABILITY OF FACILITY AND RESPONDENT
14. PLANT MAINTAINABILITY AND AVAILABILITY
15. RESPONDENT'S EXPERIENCE
16. LEVEL OF DEVELOPMENT
17. STATE AND COMMUNITY BENEFITS
18. CONTRACT TERMS AND CONDITIONS

DETAILED EVALUATION TOP 13 PROPOSALS

FILE-TOP13EVA
6/1/80
PDMEM



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF SAMUEL S. WATERS

DOCKET NO. _____

SEPTEMBER 28, 1990

1 **Q. Please state your name and business address.**

2 **A. My name is Samuel S. Waters and my business address is 9250 West**
3 **Flagler Street, Miami, Florida 33174.**

4
5 **Q. By whom are you employed and what position do you hold?**

6 **A. I am employed by Florida Power & Light Company (FPL) as the Manager**
7 **of Power Supply Planning.**

8
9 **Q. Please describe your duties and responsibilities in that position.**

10 **A. I manage the group that is responsible for the development of FPL's**
11 **generation expansion plans and other generation related activities, such**
12 **as system production cost projections. I also coordinate the annual**

1 Energy Capacity Study, which is FPL's primary cross-functional program
2 to develop an integrated plan for meeting future capacity needs.

3

4 **Q. Please describe your education and professional experience.**

5 **A. I graduated from Duke University with a Bachelor of Science Degree in**
6 **Electrical Engineering in 1974. From 1974 until 1985, I was employed by**
7 **the Advanced Systems Technology Division of Westinghouse Electric**
8 **Corporation as a consultant in the areas of Transmission Planning and**
9 **Power System Analysis Software. While employed by Westinghouse, I**
10 **earned a Masters Degree in Electrical Engineering from Carnegie-Mellon**
11 **University in 1976.**

12

13 I joined the System Planning Department of FPL in 1985 and have
14 worked in the Power Supply Planning area since that time.

15

16 I am a registered Professional Engineer in the States of Pennsylvania
17 and Florida and a Senior Member of the Institute of Electrical and
18 Electronics Engineers, Inc. (IEEE).

19

20 **Q. What is the purpose of your testimony?**

21 **A. The purpose of my testimony is to demonstrate how FPL's purchase of**
22 **Georgia Power Company's (GPC) Plant Robert W. Scherer Unit No. 4**
23 **(Scherer Unit No. 4) represents the most cost effective means of meeting**
24 **FPL's future need for new generating resources. I will discuss the**

1 Scherer Unit No. 4 purchase as it relates to FPL's most recently
2 developed expansion plan, as presented in the Petition to Determine
3 Need for Electrical Power Plant, Docket Nos. 890973-EI and 890974-EI
4 (Need Petition). In so doing, I will briefly review the planning process and
5 objectives employed at FPL, review FPL's base expansion plan as
6 presented in the Need Petition, present some significant changes which
7 have occurred since the Need Petition was filed and discuss how the
8 Scherer Unit No. 4 purchase provides other benefits to FPL customers.
9

10 Q. Are you sponsoring an exhibit in this case?

11 A. Yes. It consists of ten documents:

- 12
- 13 • *Document No. 1* is a summary of FPL's summer peak demand,
14 winter peak demand and net energy for load (NEL) forecast.
 - 15
 - 16 • *Document No. 2* is FPL's fuel forecast for residual fuel oil, natural
17 gas and coal.
 - 18
 - 19 • *Document No. 3* is a summary of the net to grid capacity forecast
20 to be available to FPL from Qualifying Facilities.
 - 21
 - 22 • *Document No. 4* is a summary of FPL's cost of capital
23 assumptions.

- 1 • *Document No. 5* is a summary of FPL's assumptions on cost and
2 performance of new generating units.
- 3
- 4 • *Document No. 6* is a summary of the O&M rates assumed for the
5 Scherer unit.
- 6
- 7 • *Document No. 7* is a graphic summary of FPL's base capacity plan
8 without the purchase of Scherer Unit No. 4.
- 9
- 10 • *Document No. 8* is a graphic summary of FPL's expected loss-of-
11 load probability (LOLP) through 1997 demonstrating a need for
12 new capacity.
- 13
- 14 • *Document No. 9* is a summary of FPL expansion plans with and
15 without the purchase of Scherer Unit No. 4.
- 16
- 17 • *Document No. 10* is a summary of the relative economics of the
18 alternatives available to meet the 1996 need.

1 **Review Of The Planning Process And Objectives**

2 **Q. What is the objective of FPL's capacity planning process?**

3 **A. The objective of the capacity planning process at FPL is to provide**
4 adequate resources to reliably meet our customers' future demand for
5 electric power in a cost-effective manner. While there are many
6 alternatives to meet this future demand, the process attempts to identify
7 a plan which properly balances cost and risk.

8

9 **Q. What alternatives are considered in the planning process?**

10 **A. Both generating and non-generating resources are considered, including:**

11

- 12 • Demand Side Management
- 13 • Qualifying Facilities
- 14 • Purchased Power
- 15 • New Generating Units

16

17 **Q. How are these alternatives integrated into FPL's capacity plan?**

18 **A. The first step of the planning process is to identify the amount of**
19 resources needed to maintain power supply system reliability. An
20 expansion plan consisting entirely of FPL constructed generating units is
21 then identified. This expansion plan is identified solely for the purpose
22 of establishing an "avoided cost" basis against which all other alternatives
23 can be evaluated. Demand side programs are introduced into the plan

1 first, followed by qualifying facilities, then purchased power. Each of
2 these resources is added to the plan to the extent it is available and cost-
3 effective. Remaining needs are met through the addition of new
4 generating capacity.

5

6 **Q. Does the development of FPL's capacity plan require that a number**
7 **of assumptions or forecasts be made?**

8 **A. Yes. Estimates of conditions must be developed for twenty to thirty years**
9 **into the future. These estimates define a scenario upon which the plan**
10 **will be based.**

11

12 **Q. What are the most critical of the assumptions used to define a**
13 **planning scenario?**

14 **A. The most critical assumptions used in the planning process are:**

15

- 16 • Demand and Energy Forecast
- 17 • Fuel Price and Availability Forecast
- 18 • Qualifying Facility (QF) Forecast
- 19 • Cost of Capital Estimate
- 20 • Cost and Performance Estimates for New Generating Units

1 **Q. What is the source of the critical assumptions used to develop the**
2 **plan?**

3 **A. Several FPL departments provide the information required to develop the**
4 **power supply plan. The demand and energy forecast is provided by the**
5 **Research, Economics and Forecasting Department. A summary of the**
6 **peak demand and net energy for load forecast is provided in my**
7 **Document No. 1. The fuel price and availability forecast is developed by**
8 **the Fuel Resources Department. A copy of the forecast for residual fuel**
9 **oil, natural gas and coal is provided in Document No. 2. The QF forecast**
10 **is provided by the Bulk Power Markets Department. A summary of the**
11 **QF megawatts (MW) assumed, by year, in the development of the plan**
12 **is presented in my Document No. 3.**

13

14 **The cost of capital estimates assumed for FPL-constructed units and for**
15 **the purchase of the Scherer Unit No. 4 is developed by FPL's Finance**
16 **Department. Document No. 4 summarizes the capital structure and the**
17 **cost of capital used in the economic analyses performed. The last of the**
18 **critical assumptions I have listed, the cost and performance for new**
19 **generating units, is developed by FPL's Project Management Department.**
20 **I have summarized this data in Document No. 5. The O&M assumptions**
21 **used for Scherer are shown in my Document No. 6.**

1 **Q. How is the amount of capacity needed to maintain system reliability**
2 **determined?**

3 **A. FPL uses two reliability criteria to determine the quantity of resources**
4 **required to maintain system reliability: summer peak reserve margin and**
5 **loss-of-load probability (LOLP). The limits established for these criteria**
6 **are a minimum summer peak reserve margin of 15% and a maximum**
7 **LOLP of 0.1 days per year. These criteria and associated limits are**
8 **commonly accepted in the utility industry.**

9
10 **Q. How are the economics of alternative means of meeting capacity**
11 **needs compared?**

12 **A. Alternative means of meeting capacity needs are compared on a present**
13 **value of revenue requirements (PVRR) basis, i.e., the total PVRR of one**
14 **alternative is compared to the PVRR of another to identify the lesser cost**
15 **option. Revenue requirements include the capital, non-fuel operating and**
16 **maintenance and fuel costs of an option, as well as the fuel cost impacts**
17 **associated with changes in system operating characteristics.**

1 **Q.** You mentioned that the planning process attempts to balance cost
2 and risk. What risks must be accounted for?

3 **A.** The risks I refer to fall generally into two categories:

4

5 • The risk of not providing adequate resources to meet customers'
6 future demand for electricity.

7

8 • The risk of making capacity decisions which do not provide the
9 most favorable economics to the customer in the long term.

10

11 These risks are a result of uncertainty over future conditions, including
12 the amount of electricity which will be demanded, the price and
13 availability of fuel, the reliability of forecast in-service dates of non-utility
14 generation including QFs, general economic conditions, environmental
15 regulation and other factors.

16

17 **Q.** How is this uncertainty dealt with in the planning process?

18 **A.** The uncertainty from the planning perspective is dealt with in two ways:
19 through diversity and flexibility. Diversity means that future demand is not
20 met through an over-reliance on any one source of energy or capacity.
21 For example, the use of several fuel sources provides for a greater
22 insulation against price or availability changes in any one fuel. Flexibility
23 refers to the ability to change plans as conditions change; for example,

1 the ability to accelerate or defer in-service dates of new capacity
2 additions as demand projections change is advantageous.

3
4 These factors must be considered in addition to cost in the development
5 of a capacity plan.
6
7

8 **Review Of FPL's Base Expansion Plan**

9 **Q. What is FPL's current base generation expansion plan, without the**
10 **Scherer Unit No. 4 purchase?**

11 **A. FPL needs approximately 5,400 MW of resources to meet projected**
12 **demand through the year 1997. FPL's current base expansion plan**
13 **consists of a mix of demand side programs, qualifying facilities,**
14 **purchased power and new generating capacity. The new generating**
15 **capacity includes the repowering of Lauderdale Unit Nos. 4 and 5, the**
16 **construction of combined cycle units, Martin Unit Nos. 3 and 4, and the**
17 **addition of approximately 800 MW of integrated coal gasification**
18 **combined cycle (IGCC) units, Martin Unit Nos. 5 and 6. This expansion**
19 **plan is summarized in graphic form in Document No. 7.**

1 **Q. Of the 5,400 MW of resources planned through 1997, how much is**
2 **filled by currently contracted and approved resources?**

3 **A. FPL has received Public Service Commission (PSC) approval for demand**
4 **side management (DSM) programs, which include conservation,**
5 **interruptible rates and residential load control. The impact of these**
6 **programs will total approximately 1,317 MW through 1997. FPL has also**
7 **received a favorable determination of need from the PSC for the**
8 **repowering of Lauderdale Unit Nos. 4 and 5, and the construction of**
9 **Martin Unit Nos. 3 and 4, totalling approximately 1,342 MW of capacity.**
10

11 In addition to the above, in 1988, FPL contracted with the Southern
12 Companies for approximately 911 MW of capacity in a Unit Power Sales
13 (UPS) arrangement. FPL has also signed contracts with QFs and
14 received PSC approval for 515 MW of capacity. In addition, FPL has
15 signed negotiated contracts totalling 352 MW which have not yet received
16 PSC approval.
17

18 The total of these contracted and approved resources is 4,085 MW,
19 leaving approximately 1,358 MW of resource need remaining to be filled
20 through 1997.

- 1 **Q. In what year does FPL need to obtain this additional capacity?**
- 2 **A. Based on LOLP analysis in which only the contracted and approved**
3 **resources were included, FPL needs approximately 200 MW of additional**
4 **capacity by 1995. The results of this analysis, showing LOLP by year,**
5 **are shown in Document No. 8.**
- 6
- 7 **Q. How would FPL plan to meet this additional need, without the**
8 **purchase of Scherer Unit No. 4?**
- 9 **A. FPL anticipates that an additional 590 MW of QF capacity will be**
10 **available by 1997. The additional need would be met through the**
11 **construction of integrated coal gasification combined cycle (IGCC) units**
12 **totalling 768 MW. The IGCC units are the most cost-effective of the new**
13 **construction generating unit options available to FPL. These units could**
14 **be phased into a 1995/1996 in-service date and address the 1995 need**
15 **I previously discussed.**
- 16
- 17 **Q. How does this plan compare to the expansion plan presented to the**
18 **Commission in Docket Nos. 890973-EI and 890974-EI, FPL's Petition**
19 **to Determine Need?**
- 20 **A. The new construction requirements are identical to those identified in**
21 **these dockets. Conservation projections are somewhat higher in the**
22 **longer term and offset a higher demand forecast.**

1 **Q. Have there been any significant changes since FPL's Need Petition**
2 **was prepared?**

3 **A. Yes. There have been two significant changes since that time which**
4 **have an impact on the generation expansion plan. First, the FPL forecast**
5 **of summer peak demand shows an increase in the short term versus the**
6 **forecast used in the Need Petition. In 1991-92, this increase is**
7 **approximately 200 MW. The longer term forecast remains basically**
8 **unchanged due to the effects of increased conservation. The second**
9 **major change is a shifting of QF resources used in the Need Petition. In**
10 **the Need Petition, FPL had forecast that 1,095 MW of QF power would**
11 **be supplied by 1997. This total amount by 1997 has not changed**
12 **substantially; the currently forecasted total is 1,105 MW. However,**
13 **included in that total were two large facilities, 225 MW and 300 MW, to**
14 **be in-service to meet the summer peaks in 1993 and 1995, respectively.**
15 **These facilities represent a substantial share of FPL's total QF**
16 **purchases, and have subsequently been delayed to in-service dates**
17 **which will meet the summer peaks of 1994 and 1996, respectively.**

18
19 **Q. Have these changes threatened system reliability?**

20 **A. No. They do tend to reduce the projected reserves in FPL's capacity**
21 **plan and are, therefore, cause for concern. They also have occurred in**
22 **a time frame in which it is not feasible to economically construct**
23 **additional new capacity, if it were required. Even with these changes,**

1 FPL projects its next capacity addition would be in the 1995-96 time
2 frame, since reliability standards are not violated before that time.

3

4

5 **The Impact Of Scherer Unit No. 4 On The Plan**

6 **Q. How does the purchase of Scherer Unit No. 4 fit into FPL's current**
7 **base expansion plan?**

8 **A. The purchase of Scherer Unit No. 4 would allow the deferral of Martin**
9 **Unit Nos. 5 and 6, the IGCC units, which were scheduled to begin**
10 **service in 1996, assuming that the additional 590 MW of potential QF**
11 **capacity is also obtained.**

12

13 **Q. Does the purchase of Scherer Unit No. 4 have any impact on the**
14 **scheduled capacity to be brought in-service prior to 1996?**

15 **A. No. Although, as described in Mr. Cepero's testimony, the purchase of**
16 **the unit begins in 1991, the Lauderdale repowering and construction of**
17 **Martin Unit Nos. 3 and 4 have not been deferred. Deferral of this new**
18 **capacity would be unwise at this time given the changes in the load**
19 **forecast and the expected in-service dates of QF capacity which I**
20 **discussed earlier. If these new units were to be delayed, and any further**
21 **changes were to occur resulting in additional capacity need, there may**
22 **not be sufficient lead time to reschedule these units back to their original**
23 **in-service dates.**

1 **Q. Please describe the final impact of the Scherer Unit No. 4 purchase**
2 **on FPL's current base generation expansion plan.**

3 **A. The purchase of 646 MW of Scherer Unit No. 4 defers Martin Unit Nos. 5**
4 **and 6 from 1996 to 1998. Subsequent units in the base generation**
5 **expansion plan are also delayed by the purchase of Scherer Unit No. 4.**
6 **The net effect of the purchase of 646 MW is to avoid an approximately**
7 **equal amount of capacity in the base plan for the life of the unit. I have**
8 **summarized the expansion plans through 1998 with and without Scherer**
9 **Unit No. 4 in Document No. 9.**

10

11 **Q. Is this purchase of Scherer Unit No. 4 more cost effective than**
12 **construction of new capacity by FPL?**

13 **A. Yes. When compared to construction of the IGCC units, Martin Unit**
14 **Nos. 5 and 6, the purchase of Scherer Unit No. 4 produces a cumulative**
15 **net present value savings of \$584 million over thirty years.**

16

17 **Q. How do the economics of this purchase compare to the projects**
18 **proposed to FPL in its capacity RFP?**

19 **A. The evaluation of these projects is described in Mr. Denis' testimony.**
20 **The most economic proposal submitted in response to the RFP was, in**
21 **fact, the Georgia Power proposal offering Scherer Unit No. 4 in a UPS**
22 **arrangement. The analysis I have performed shows that the purchase**
23 **arrangement of Scherer Unit No. 4 produces approximately \$15 million**

1 more savings in present value terms than the UPS proposal. This does
2 not reflect certain other benefits associated with the purchase.

3

4 **Q. Are there additional benefits provided by the purchase of Scherer**
5 **Unit No. 4 when compared to the UPS arrangement?**

6 **A. Yes. The purchase of Scherer Unit No. 4 offers several other benefits**
7 **when compared to the UPS offer, including:**

8

9 • Facilitation of the expansion of the Southern-Florida transmission
10 interface.

11

12 • Inclusion of associated emission allowances in the sale.

13

14 • Assuming the unit life will extend beyond thirty years, FPL will not
15 have to replace the capacity, as it would under the UPS
16 arrangement.

17

18 **Q. How does the Scherer Unit No. 4 purchase compare to purchases**
19 **from QFs?**

20 **A. The economics of the Scherer Unit No. 4 purchase compare favorably to**
21 **purchases from QFs under a Standard Offer contract. The purchase of**
22 **Scherer Unit No. 4 saves approximately \$436 million versus the 1996**
23 **Standard Offer at no risk factor and \$225 million versus the Standard**

1 Offer at a 20% risk factor cumulative present value over thirty years. In
2 addition, the Scherer Unit No. 4 purchase offers less risk to ratepayers
3 than purchases from QFs, or from Independent Power Producers (IPPs).
4
5 **Q. How does the purchase of Scherer Unit No. 4 present less risk to**
6 **FPL ratepayers than purchases from QFs or IPPs from a planning**
7 **perspective?**
8 **A. When compared to any unit which is not currently in-service, Scherer Unit**
9 **No. 4 has an advantage, in that it is already licensed, constructed and**
10 **operating. It offers proven technology and performance. Additional**
11 **comfort is provided by the fact that this is a sister unit to several others**
12 **at the same site which have a proven track record. New QF or IPP units**
13 **introduce uncertainty over operating performance and delivery schedules.**
14 **In addition, those QF facilities which operate under a Standard Offer**
15 **contract represent even greater risk since there is little certainty of**
16 **performance guaranteed in the contract.**
17
18 **Q. Would you please summarize the economics of the Scherer Unit**
19 **No. 4 purchase?**
20 **A. Yes. I have shown, in summary form, the components of cost of the**
21 **several expansion alternatives in Document No. 10.**

1 **Q. Does FPL have sufficient transmission capacity to take delivery of**
2 **the Scherer Unit No. 4 purchase?**

3 **A. Yes, given the allocation of transfer capability associated with this**
4 **agreement.**

5
6 **Q. Has additional transmission capability been factored into your**
7 **economic analysis?**

8 **A. Yes. The availability to FPL of an additional 500 MW of transmission**
9 **transfer capability over the Florida-Southern interface, as discussed in**
10 **Mr. Cepero's testimony, has been modeled. The additional transfer**
11 **capability also allows FPL to take advantage of additional short term**
12 **economy purchases when available. Overall, the purchase of Scherer**
13 **Unit No. 4 and the addition of new interface capability provide increased**
14 **benefits versus the purchase alone. Assuming approximately \$180**
15 **million as a rough estimate for the cost of adding 500 MW of new**
16 **transmission interface capacity for FPL, the purchase of Scherer Unit No.**
17 **4, along with the increased ability to make economy purchases, provides**
18 **the approximately \$584 million of cumulative net present value revenue**
19 **requirement savings when compared to the base case expansion plan.**

1 **Q.** **Since Scherer Unit No. 4 is coal-fired, will pending acid rain**
2 **legislation have a negative impact on the economics of the**
3 **purchase?**

4 **A.** **No, pending acid rain legislation is not expected to have a negative**
5 **impact on the economics under currently proposed legislation. As**
6 **described in Mr. Cepero's testimony, FPL will be entitled to, as part of the**
7 **purchase, any emission and other such environmental allowances**
8 **associated with its undivided ownership interest in Scherer Unit No. 4 as**
9 **a result of the contemplated amendments to the Clean Air Act or any**
10 **other legislative or regulatory action. These allowances will be a**
11 **permanent increment to FPL's total.**

12

13 **Q.** **You mentioned earlier that you deal with uncertainty in the plan with**
14 **diversity and flexibility. How does the purchase of Scherer Unit**
15 **No. 4 contribute to these goals?**

16 **A.** **Scherer Unit No. 4 increases the amount of energy supplied by coal in**
17 **the FPL fuel mix. Currently, FPL produces approximately 2% of its**
18 **energy from coal-fired generation. With the purchase of Scherer Unit**
19 **No. 4, that will increase to approximately 8% by 1997. This increase in**
20 **coal-fired generation improves the diversity of the fuel mix. Flexibility,**
21 **which is contained in the FPL base plan without Scherer, is maintained**
22 **with the Scherer purchase, which provides early capacity capable of**

1 addressing changes in the very near term, some of which we have
2 already seen.

3

4 **Q. Would you please summarize the advantages of the purchase of**
5 **Scherer Unit No. 4, from a planning perspective?**

6 **A. First and foremost, the purchase of 646 MW of Scherer Unit No. 4**
7 **provides a savings of \$584 million versus construction of a new unit by**
8 **FPL. It also provides competitive economics versus the best project**
9 **offered in FPL's capacity RFP and versus potential qualifying facility**
10 **projects. Thus, it is the most cost effective means of meeting future**
11 **demand available to FPL at this time.**

12

13 In addition to favorable economics, the purchase offers a number of other
14 advantages. First, the unit is a known quantity with demonstrated
15 performance and identified costs. Second, it is a coal-fired unit with a
16 high availability which helps diversify FPL's fuel mix. The potential
17 downside of acid rain related costs has been addressed, as allowances
18 are included as part of the purchase.

19

20 Third, the purchase offers capacity in the short term, which will reduce
21 concern over volatile assumptions in the load forecast and QF supply.
22 The unit is dispatchable, and maintenance scheduling will be defined by
23 FPL. In addition, when packaged with the additional transmission

1 capability, FPL will be able to take advantage of future economy energy
2 availability. All of these advantages serve to benefit FPL customers.

3

4 Overall, the purchase of Scherer Unit No. 4 represents the best option
5 available to meet FPL's 1996 capacity need.

6

7 **Q. Does this conclude your testimony?**

8 **A. Yes, it does.**

FPL 1990 Load Forecast

SUMMER PEAK			
Year	MW	Year	MW
1990	13,420	2000	16,700
1991	13,815	2001	17,061
1992	14,180	2002	17,406
1993	14,387	2003	17,761
1994	14,694	2004	18,160
1995	15,118	2005	18,448
1996	15,390	2006	18,946
1997	15,694	2007	19,352
1998	16,019	2008	19,773
1999	16,262		

WINTER PEAK			
Year	MW	Year	MW
1990-91	14,132	2000-01	18,941
1991-92	14,642	2001-02	19,437
1992-93	15,144	2002-03	19,962
1993-94	15,632	2003-04	20,485
1994-95	16,058	2004-05	21,022
1995-96	16,534	2005-06	21,566
1996-97	17,015	2006-07	22,118
1997-98	17,496	2007-08	22,677
1998-99	17,976	2008-09	23,273
1999-00	18,456		

NEL FORECAST			
Year	GWH	Year	GWH
1990	71,747	2000	91,154
1991	74,308	2001	93,494
1992	76,840	2002	95,759
1993	78,746	2003	98,130
1994	80,351	2004	100,756
1995	82,048	2005	103,398
1996	83,434	2006	105,995
1997	85,070	2007	108,859
1998	86,895	2008	111,795
1999	89,097		

Florida Power & Light Company
 Docket No. _____
 FPL Witness: S.S. Waters
 Exhibit No. _____ (Document 1)
 Page 1 of 1

**1989 To 2018 Long Term Fossil Fuel Price Forecast
Constant 1989 Dollar And Nominal Dollar Prices Approved By
The Forecast Review Board On May 4, 1989
Delivered Constant 1989 Dollar & Nominal Dollar Coal Prices
In Dollars Per Ton & Per MMBTU**

Most Likely Scenario

	St. Johns River Power Park (\$/MMBTU)	High Sulfur Coal To Martin (\$/MMBTU)	Scherer (\$/MMBTU)
Year	Nominal	Nominal	Nominal
1989	1.72	1.69	---
1990	1.78	1.73	1.81
1991	1.84	1.77	1.88
1992	1.82	1.83	1.95
1993	1.89	1.92	2.04
1994	1.95	2.02	2.12
1995	2.03	2.16	2.23
1996	2.13	2.30	2.34
1997	2.12	2.46	2.43
1998	2.23	2.63	2.51
1999	2.34	2.82	2.63
2000	2.45	3.02	2.77
2001	2.59	3.23	2.93
2002	2.60	3.45	3.08
2003	2.72	3.70	3.24
2004	2.88	3.94	3.39
2005	3.03	4.21	3.57
2006	3.18	4.53	3.75
2007	3.23	4.84	3.93
2008	3.41	5.18	4.13
2009	3.60	5.53	4.35
2010	3.80	5.97	4.62
2011	4.01	6.37	4.85
2012	4.13	6.84	5.09
2013	4.37	7.33	5.35
2014	4.63	7.86	5.61
2015	4.90	8.46	5.90
2016	4.96	9.06	6.19
2017	5.43	9.74	6.50
2018	5.75	10.45	6.83

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**1989 To 2018 Long Term Fossil Fuel Price Forecast
Constant 1989 Dollar And Nominal Dollar Prices Approved By
The Forecast Review Board On May 4, 1989
Delivered Constant 1989 Dollar & Nominal Dollar
Natural Gas Prices In Dollars Per MMBTU**

Most Likely Scenario

Year	Interruptible Natural Gas \$/MMBTU		Firm Natural Gas \$/MMBTU		Average Natural Gas \$/MMBTU	
	1989\$	Nominal	1989\$	Nominal	1989\$	Nominal
1989	2.49	2.49	2.21	2.21	2.48	2.48
1990	2.40	2.51	2.54	2.64	2.51	2.62
1991	2.46	2.69	2.61	2.83	2.60	2.81
1992	2.72	3.10	2.81	3.17	2.80	3.17
1993	2.99	3.56	3.08	3.63	3.08	3.63
1994	3.29	4.12	3.40	4.19	3.39	4.18
1995	3.57	4.70	3.63	4.70	3.63	4.70
1996	3.82	5.29	3.89	5.29	3.89	5.29
1997	4.04	5.89	4.11	5.89	4.11	5.89
1998	4.22	6.50	4.30	6.49	4.30	6.49
1999	4.37	7.10	4.45	7.09	4.45	7.09
2000	4.50	7.73	4.55	7.65	4.56	7.66
2001	4.61	8.36	4.56	8.06	4.57	8.09
2002	4.71	9.01	4.56	8.50	4.59	8.55
2003	5.18	10.18			5.18	10.18
2004	5.28	10.92			5.28	10.92
2005	5.37	11.69			5.37	11.69
2006	5.46	12.51			5.46	12.51
2007	5.55	13.37			5.55	13.37
2008	5.65	14.29			5.65	14.29
2009	5.73	15.26			5.73	15.26
2010	5.83	16.32			5.83	16.32
2011	5.92	17.44			5.92	17.44
2012	6.02	18.65			6.02	18.65
2013	6.13	19.97			6.13	19.97
2014	6.24	21.39			6.24	21.39
2015	6.36	22.93			6.36	22.93
2016	6.49	24.61			6.49	24.61
2017	6.62	26.42			6.62	26.42
2018	6.76	28.36			6.76	28.36

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**1989 To 2018 Long Term Fossil Fuel Price Forecast
Constant 1989 Dollar And Nominal Dollar Prices Approved By
The Forecast Review Board On May 4, 1989
Natural Gas Availability In Millions Of Cubic Feet Per Day**

Most Likely Scenario

Year	Interruptible	Firm	Total
1989	394	19	413
1990	75	327	402
1991	38	327	365
1992	34	327	361
1993	29	327	356
1994	29	327	356
1995	29	327	356
1996	29	327	356
1997	31	327	358
1998	34	327	361
1999	36	327	363
2000	40	327	367
2001	33	327	360
2002	33	327	360
2003	354		354
2004	354		354
2005	358		358
2006	351		351
2007	360		360
2008	360		360
2009	360		360
2010	360		360
2011	360		360
2012	360		360
2013	360		360
2014	360		360
2015	360		360
2016	360		360
2017	360		360
2018	360		360

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1989 TO 2018 LONG-TERM FOSSIL FUEL PRICE FORECAST
CONSTANT 1989 DOLLAR AND NOMINAL DOLLAR PRICES APPROVED BY THE FORECAST REVIEW BOARD ON MAY 4, 1989
DELIVERED CONSTANT 1989 DOLLAR & NOMINAL DOLLAR FUEL OIL PRICES IN DOLLARS PER BARREL & PER MBBTU

MOST LIKELY SCENARIO

YEAR	DISTILLATE FUEL OIL				0.7% SULFUR FUEL OIL				1.0% SULFUR FUEL OIL			
	\$/BBL		\$/MBBTU		\$/BBL		\$/MBBTU		\$/BBL		\$/MBBTU	
	1989\$	NOMINAL	1989\$	NOMINAL	1989\$	NOMINAL	1989\$	NOMINAL	1989\$	NOMINAL	1989\$	NOMINAL
1989	22.50	22.50	3.86	3.86	18.45	18.45	2.90	2.90	17.95	17.95	2.82	2.82
1990	22.08	23.02	3.79	3.95	17.85	18.60	2.80	2.92	17.37	18.10	2.73	2.85
1991	23.33	25.37	4.00	4.35	18.27	19.84	2.87	3.11	17.78	19.31	2.80	3.04
1992	26.14	29.69	4.48	5.09	20.01	22.70	3.14	3.56	19.47	22.08	3.06	3.47
1993	29.17	34.56	5.00	5.93	21.84	25.83	3.43	4.05	21.25	25.12	3.34	3.95
1994	32.25	40.05	5.53	6.87	23.93	29.65	3.76	4.65	23.28	28.83	3.66	4.53
1995	35.05	45.72	6.01	7.84	25.85	33.63	4.06	5.28	25.14	32.69	3.95	5.14
1996	37.57	51.63	6.44	8.86	27.55	37.76	4.32	5.93	26.79	36.71	4.21	5.77
1997	39.80	57.68	6.83	9.89	29.02	41.95	4.56	6.59	28.22	40.78	4.44	6.41
1998	41.73	63.82	7.16	10.95	30.27	46.18	4.75	7.25	29.43	44.89	4.63	7.06
1999	43.36	70.05	7.44	12.01	31.29	50.43	4.91	7.92	30.42	49.01	4.78	7.71
2000	44.81	76.52	7.69	13.13	32.17	54.81	5.05	8.61	31.28	53.28	4.92	8.38
2001	46.14	83.15	7.91	14.26	32.97	59.27	5.18	9.30	32.05	57.60	5.04	9.06
2002	47.27	89.88	8.11	15.42	33.61	63.76	5.28	10.01	32.67	61.96	5.14	9.74
2003	48.23	96.58	8.27	16.57	34.14	68.19	5.36	10.71	33.18	66.27	5.22	10.42
2004	49.22	103.80	8.44	17.80	34.67	72.94	5.44	11.45	33.70	70.89	5.30	11.15
2005	50.07	111.19	8.59	19.07	35.11	77.78	5.51	12.21	34.13	75.59	5.37	11.88
2006	50.85	118.81	8.72	20.38	35.49	82.73	5.57	12.99	34.50	80.40	5.42	12.64
2007	51.56	126.73	8.84	21.74	35.83	87.85	5.62	13.79	34.82	85.38	5.48	13.42
2008	52.21	135.02	8.96	23.16	36.12	93.19	5.67	14.63	35.11	90.56	5.52	14.24
2009	52.78	143.61	9.05	24.63	36.36	98.68	5.71	15.49	35.34	95.90	5.56	15.08
2010	53.37	152.77	9.15	26.20	36.61	104.53	5.75	16.41	35.58	101.58	5.59	15.97
2011	53.88	162.25	9.24	27.83	36.80	110.54	5.78	17.35	35.77	107.42	5.62	16.89
2012	54.39	172.31	9.33	29.56	36.99	116.90	5.81	18.35	35.95	113.60	5.65	17.86
2013	54.92	183.03	9.42	31.39	37.19	123.65	5.84	19.41	36.15	120.16	5.68	18.89
2014	55.43	194.36	9.51	33.34	37.38	130.76	5.87	20.53	36.33	127.07	5.71	19.98
2015	55.94	206.37	9.60	35.40	37.57	138.27	5.90	21.71	36.52	134.37	5.74	21.13
2016	56.48	219.18	9.69	37.60	37.78	146.25	5.93	22.96	36.72	142.12	5.77	23.35
2017	57.00	232.71	9.78	39.92	37.97	154.65	5.96	24.28	36.91	150.29	5.80	23.63
2018	57.47	246.68	9.86	42.31	38.13	163.22	5.99	25.62	37.07	158.60	5.83	24.94

**Cogeneration
Small Power Producer Forecast
(Cumulative By Year)**

Year	Under Contract	Not Under Contract	Total
1990	0	0	0
1991	0	0	0
1992	303.1	60.0	363.0
1993	303.1	130.0	433.1
1994	528.1	159.5	687.6
1995	538.1	233.0	780.1
1996	838.1	254.5	1,092.5
1997	838.1	267.0	1,105.1

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**Summary Of Financial And Economic Assumptions
Used For FPL Constructed Units
(For Long Range Planning Purposes)**

Projected Capitalization Ratios		Projected Cost Of Capital	
Debt	44%	Debt	10.0%
Preferred	09%	Preferred	10.0%
Equity	47%	Equity	14.5%
Tax Assumptions			
Rates		Book Life	
State	5.50%	Combustion Turbines	30 Years ^{2/}
Federal	32.13% ^{1/}	Combined Cycle	30 Years
Effective	37.63%	Coal Gasifier	30 Years
Tax Depreciation Life: 21 Years			
^{1/} State income taxes are deductible for federal tax purposes and thus, effectively reduce the federal tax rate from 34% to 32.13%.			
^{2/} Designed with the capability of future conversion to combined cycle operation.			
Annual Escalation Assumptions (In Percent)			
Year	General ^{1/} Inflation	Plant ^{2/} Construction Cost	O&M Cost ^{3/}
1989	4.5	5.1	5.0
1990	4.5	5.0	4.9
1991	4.5	5.0	4.9
1992	4.6	5.1	5.0
1993	4.4	5.0	4.9
1994	4.9	5.1	5.0
1995	5.1	5.6	5.4
1996	5.3	5.6	5.4
1997	5.4	5.6	5.4
1998	5.5	5.6	5.4
1999-2015	5.4	5.6	5.4
^{1/} ^{2/} ^{3/}	GNP Implicit Price Deflator (IPD) Producer Price Index (PPI) for Capital Goods Consumer Price Index (CPI)		

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Generation Options: Planning Assumptions		
Notes	IGCC (Advanced)	IGCC (Advanced)
Unit	Initial	Extension
Site	Martin	Martin
Size, MW (Net Summer)	768	768
Fuel • Primary • Back-Up	Coal No. 2 Oil	Coal No. 2 Oil
Heat Rate (BTU/KWH) • 100% • 75% • 50%	8,781 8,957 9,220	8,781 8,957 9,220
Reliability • F.O.R. (%) • E.F.O.R. (%) • Maintenance (week/yr) • Equiv. Avail. (%)	2.6 6.3 3.5 87.0	2.6 6.3 3.5 87.0
O&M^{1/} • Fixed (\$/KW-year) • Variable (\$/MW)	40.75 0.92	30.60 0.69
Capital^{1/} • \$/KW	1,376	1,078
Schedule • Lic./Eng. (months) • Construction	48 33	48 33
Cash Flow^{1/} • Year 1 • Year 2 • Year 3 • Year 4 • Year 5 • Year 6 • Year 7 • Year 8 • Year 9 • Year 10	6,342 26,956 120,509 286,473 369,985 215,119 27,182 4,530 --- ---	3,083 13,575 61,410 137,690 218,188 262,772 112,590 18,765 --- ---
Total	1,057,096	828,073
Note: ^{1/} All Cost Estimates Are expressed In 1989 \$		

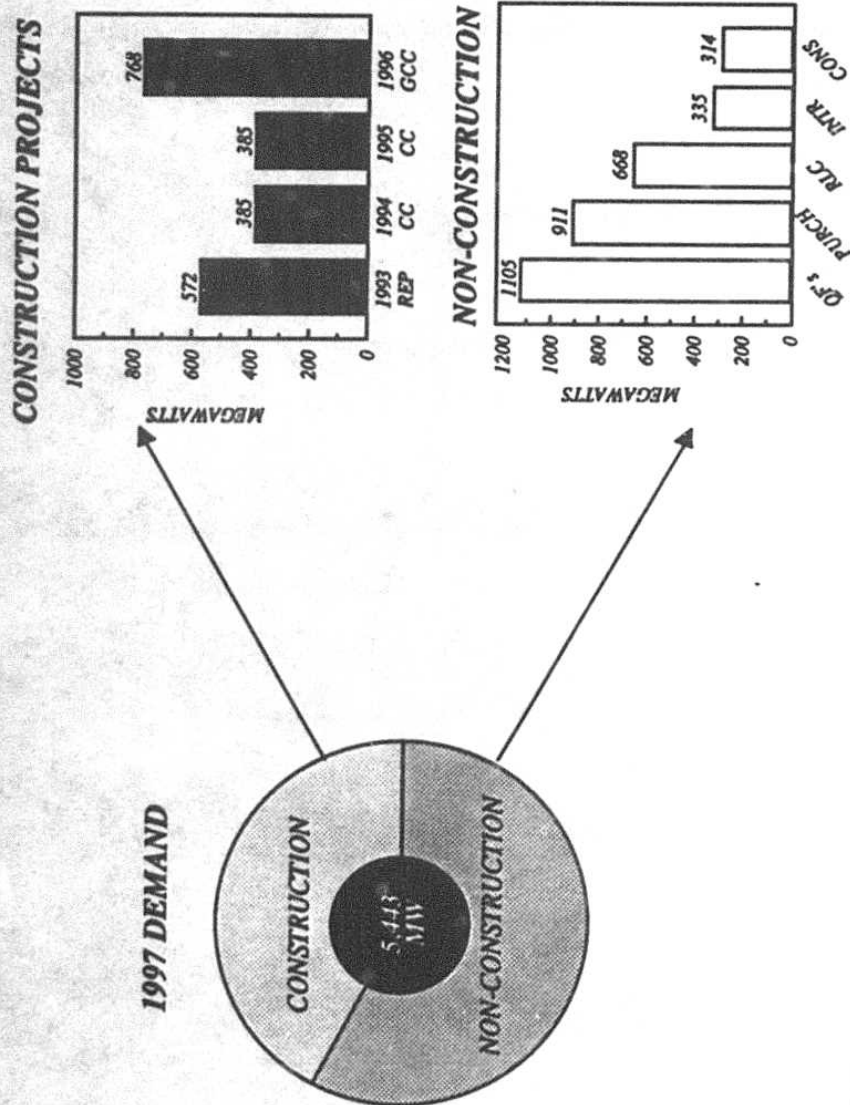
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**Scherer Purchase
O&M Cost Assumptions**

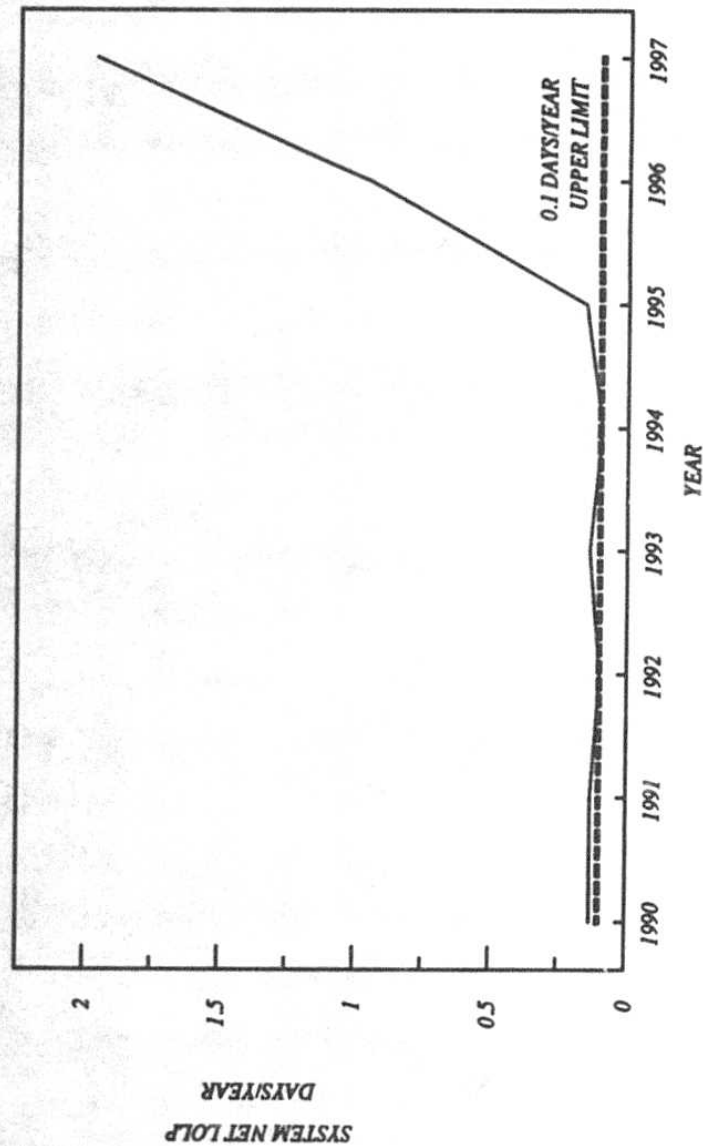
<i>Year</i>	<i>Fixed O&M Cost (\$/MW-Month)</i>	<i>Variable O&M Cost (\$/MWH)</i>	<i>Year</i>	<i>Fixed O&M Cost (\$/MW-Month)</i>	<i>Variable O&M Cost (\$/MWH)</i>
1991	833	0.25	2008	1,517	0.46
1992	833	0.25	2009	1,584	0.48
1993	833	0.25	2010	1,653	0.50
1994	833	0.25	2011	1,726	0.52
1995	869	0.26	2012	1,802	0.54
1996	908	0.27	2013	1,810	0.57
1997	948	0.29	2014	1,817	0.59
1998	997	0.30	2015	1,832	0.62
1999	1,038	0.31	2016	1,851	0.65
2000	1,082	0.32	2017	1,867	0.68
2001	1,128	0.34	2018	1,867	0.71
2002	1,176	0.35	2019	1,897	0.74
2003	1,226	0.37	2020	1,917	0.77
2004	1,280	0.39	2021	1,941	0.80
2005	1,336	0.40	2022	1,967	0.84
2006	1,392	0.42	2023	1,995	0.87
2007	1,453	0.44			

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CAPACITY PLAN COMPONENTS



LOSS OF LOAD PROBABILITY



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**Comparison Of FPL Expansion Plans
With And Without Scherer Unit No. 4**

	Expansion Plan^{1/} Without Scherer	Expansion Plan^{2/} With Scherer
Year	Addition	Addition
1991	-----	-----
1992	-----	-----
1993	Repowering of Lauderdale Nos. 4, 5	Repowering of Lauderdale Nos. 4, 5
1994	Martin Combined Cycle, Unit No. 3	Martin Combined Cycle, Unit No. 3
1995	Martin Combined Cycle, Unit No. 4	Martin Combined Cycle, Unit No. 4
1996	Martin Integrated Coal Gasification, Unit Nos. 5, 6	Scherer Unit No. 4
1997	-----	-----
1998	Unsitd Initial Coal Gasification Unit Nos. 1, 2	Martin Integrated Coal Gasification, Unit Nos. 5, 6
^{1/}	Source: Petition to Determine Need for Electrical Power Plant 1993-1996 (Revised November, 1989). Docket Nos. 890973-EI and 890974-EI.	
^{2/}	Assumes expansion of transmission interface capabilities by 500 MW.	

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Comparison Of Generation Option Economics

			⁽¹⁾ Fixed Cost ^{1/}		⁽²⁾ O&M Cost ^{2/}		⁽³⁾ Unit Fuel Cost		⁽⁴⁾ System Fuel Cost	⁽¹⁾⁺⁽²⁾⁺⁽³⁾⁺⁽⁴⁾ Total Cost
Option	MW	Contract Or In- Service Year	Total (000, Nominal \$)	CPVRR (000, 1991\$)	Total (000, Nominal \$)	CPVRR (000, 1991\$)	Total (000, Nominal \$)	CPVRR (000, 1991\$)	CPVRR (000, 1991\$)	CPVRR (000, 1991\$)
Base Case - IGCC	768	1996	6,426,267	1,668,401	2,258,636	375,804	5,443,437	905,555	40,439,193	43,388,953
Scherer Purchase	646	1991	3,098,838	955,557	337,182	71,291	5,069,289	1,071,527	40,707,016	42,805,391
Scherer UPS	646 ^{3/}	1994	3,399,419	845,917	327,434	66,413	5,605,507	1,088,979	40,819,530	42,820,839
Standard Offer ^{4/} 20% Risk Factor	646	1996	3,537,888	583,220	1,571,796	261,480	2,943,571	476,821	41,709,136	43,030,657
Standard Offer ^{4/} No Risk Factor	646	1996	4,422,360	729,048	1,964,744	326,873	2,943,571	476,821	41,709,136	43,241,878

Notes:

1/ Fixed costs include generation and transmission revenue requirements.

2/ O&M Costs include fixed and variable O&M.

3/ The offer in the RFP was 848 MW. Costs have been adjusted to reflect 646 MW of capacity for comparison to the purchase.

4/ Reflects FPL Standard Offer Contract dated 6-25-90 based on 500 MW coal unit.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

ON BEHALF OF FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF HUGH A. GOWER

DOCKET NO. _____

SEPTEMBER 28, 1990

1 Q. Please state your name, occupation, and business
2 address.

3 A. My name is Hugh A. Gower, and I am a partner in
4 Arthur Andersen & Co., a firm of independent
5 public accountants, at 133 Peachtree Street,
6 N.E., Atlanta, Georgia 30303.

7

8 Q. What are your responsibilities with Arthur
9 Andersen & Co.?

10 A. Currently, I am area director of the utilities
11 and telecommunications industries practice of
12 Arthur Andersen & Co. for the southeastern
13 region of the United States. As such, I have
14 responsibility for directing the services
15 provided for our clients, training of personnel,
16 and various administrative matters. I also
17 have, or have had, direct responsibility for the
18 services we provide to several electric, gas,

1 telephone, air carrier, and motor carrier
2 clients located in the Southeast.

3

4 Q. Please outline your educational and professional
5 qualifications and experience related to
6 regulated companies and rate-making matters.

7 A. I am a graduate of the University of Florida
8 with a bachelor of science degree in accounting
9 and economics. I am a certified public
10 accountant in the states of Florida, Georgia,
11 Alabama, and several others. I am a member of
12 the American Institute of Certified Public
13 Accountants and other professional
14 organizations. I have been continuously engaged
15 in the practice of public accounting since
16 graduation from college.

17

18 While I have had experience in a number of
19 industries, substantially all of my work for
20 more than 30 years has been devoted to our
21 public utilities and telecommunications
22 practice. In addition to electric utility
23 companies, our practice includes gas
24 distribution, gas transmission, telephone, motor
25 carrier, and airline companies. I have

1 performed independent audits of public
2 utilities, as a result of which Arthur Andersen
3 & Co. has issued reports on the financial
4 statements of such companies, and have
5 supervised work in connection with the issuance
6 of billions of dollars of securities by public
7 utilities. I have also participated in and have
8 supervised work in connection with audits of
9 various statements, schedules, and other data
10 required in connection with annual reports or
11 rate applications before the Federal Energy
12 Regulatory Commission (FERC) and various state
13 public service commissions.

14
15 I have directed revenue requirements studies
16 involving the analysis of rate base, operating
17 revenues, and operating expenses. I have
18 provided expert testimony and assisted other
19 members of Arthur Andersen & Co. and clients in
20 the preparation of rate case testimony and
21 exhibits in cases before federal and state
22 regulatory commissions, including the Florida
23 Public Service Commission (FPSC or the
24 Commission). In addition, I have participated
25 in the preparation of Arthur Andersen & Co.'s

1 position statements on utility accounting and
2 rate matters being considered by legislative
3 bodies and regulatory agencies. I chaired the
4 Auditing and Regulatory Subcommittee of the
5 Telecommunications Industry Advisory Group which
6 advised the Federal Communications Commission in
7 connection with its adoption of its new Uniform
8 System of Accounts (Part 32). Specifically, the
9 subcommittee dealt with issues regarding
10 compliance with generally accepted accounting
11 principles and proper reporting for both
12 regulatory and general-purpose financial
13 statements when regulatory rate-setting
14 practices are based upon methods other than
15 generally accepted accounting principles or when
16 multiple commissions having jurisdiction over
17 the same company follow different accounting and
18 rate-making methods.

19
20 I have participated in and directed the
21 development of financial forecasting models,
22 including one of the earliest corporate
23 financial forecasting models developed in the
24 electric utility industry. I have directed the
25 preparation of financial forecasts and have also

1 conducted reviews of financial forecasts for
2 companies employing both manual and mechanized
3 forecasting systems. In addition, I have
4 participated in the development of accounting
5 and management information systems as well as a
6 variety of operating systems and have directed
7 other special studies designed to enhance
8 control over utility resources, including fuel,
9 construction, materials, and labor.

10

11 In recent years, a substantial part of my work
12 has been devoted to consulting with public
13 utilities and others regarding the economic
14 effects of contemplated transactions and
15 regarding various rate-making concepts and
16 practices. I have also directed management
17 audits, the purpose of which was to assess
18 whether management systems and procedures
19 promote economy and efficiency of operations.

20

21 Q. What is the purpose of your testimony?

22 A. The purpose of my testimony is to show:

- 23 1. How Florida Power & Light Company's (FPL or
24 the Company) accounting for the purchase of
25 an undivided interest in Georgia Power

1 Company's (Georgia Power) Plant Robert W.
2 Scherer Unit No. 4 (Scherer Unit No. 4)
3 complies with the requirements of the FERC
4 Uniform System of Accounts, particularly
5 with respect to the related plant
6 acquisition adjustment.

7 2. Why FPL's proposal to include the Scherer
8 Unit No. 4 plant acquisition adjustment
9 (together with the original cost less
10 accumulated depreciation) in rate base and
11 to amortize the acquisition adjustment as
12 an operating expense comports with sound
13 rate-making practices, is reasonable, and
14 should be approved by the Commission.

15

16 Q. Have you prepared an exhibit in connection with
17 your testimony?

18 A. Yes, it consists of one document. Document No.
19 1 shows the calculation of the plant acquisition
20 adjustment that is expected to result from FPL's
21 purchase of an undivided interest in Scherer
22 Unit No. 4.

23

24 Q. What are the essentials of the proposed
25 transaction between FPL and Georgia Power?

1 A. As detailed in the testimony of FPL witnesses,
2 FPL proposes to purchase a 646 MW share of the
3 846 MW Scherer Unit No. 4 in four increments
4 from January 1, 1991 to June 1, 1995. Over the
5 purchase period, FPL will pay Georgia Power
6 approximately \$615,500,000 in cash, financing
7 the transaction from usual sources of capital.
8 This unit will be operated on FPL's behalf by
9 Georgia Power.

10

11 Q. Please summarize the economic and other benefits
12 of the Scherer Unit No. 4 purchase.

13 A. The economic and other benefits which make the
14 Scherer Unit No. 4 purchase superior to other
15 available alternatives are summarized below:

16

17 ● Economic savings in comparison to other
18 alternatives including construction,
19 purchased power and cogeneration. (S. S.
20 Waters, pp. 14-16).

21

22 ● Expansion of Southern Company/Florida
23 transmission interface (G. R. Cepero, p.
24 7).

25

- 1 ● Improved diversification of fuel mix (S. S.
2 Waters, p. 18).
- 3
- 4 ● Known quantity with demonstrated
5 performance and identified cost. (S. S.
6 Waters, p. 20).
- 7
- 8 ● Receipt of valuable Clean Air Act emission
9 credits (G. R. Cepero, p. 6).
- 10
- 11 ● Meets short-term capacity needs (S. S.
12 Waters, p. 19).
- 13
- 14 ● Potentially greater life span of fossil-
15 fired unit (G. R. Cepero, p. 6).
- 16
- 17

18 Q. What is the relationship between Arthur
19 Andersen & Co., Georgia Power, and FPL insofar
20 as it relates to this proposed transaction?

21 A. Arthur Andersen & Co. serves as independent
22 public accountants providing financial auditing,
23 tax, and consulting services to Georgia Power as
24 well as its parent company, The Southern
25 Company, and The Southern Company's other

1 subsidiary companies. I was personally
2 responsible for directing Arthur Andersen &
3 Co.'s audits of The Southern Company for the
4 years 1983 through 1989 and, in addition, at
5 various times directed the audits of each of its
6 operating subsidiaries. It has been several
7 years, however, since I directed our audits of
8 Georgia Power. Neither I nor any representative
9 of Arthur Andersen & Co. participated in the
10 negotiations or assisted in the formation of the
11 proposed Scherer Unit No. 4 transaction nor do
12 we have any financial interest in the outcome.
13 Our involvement was limited to customary advice
14 regarding the financial accounting and income
15 tax consequences of the transaction based upon
16 the terms being considered by the companies.

17

18 Q. With what accounting requirements must FPL
19 comply with respect to this purchase
20 transaction?

21 A. FPL must account for this purchase in accordance
22 with generally accepted accounting principles
23 and the FERC Uniform System of Accounts.
24 Accordingly, the total cost of the generating
25 unit will be capitalized on FPL's books and

1 depreciated over the estimated useful life of
2 the unit.

3

4 Q. Do the requirements of the Uniform System of
5 Accounts differ from generally accepted
6 accounting principles?

7 A. No, the Uniform System of Accounts and generally
8 accepted accounting principles both require that
9 the total cost of the purchased generating unit
10 be capitalized. Additionally, the Uniform
11 System of Accounts will require that the total
12 purchase price be segregated between
13 (1) original cost, less accumulated depreciation
14 as reflected on Georgia Power's books at the
15 date of sale, and (2) plant acquisition
16 adjustment and that these amounts be recorded in
17 separate accounts.

18

19 Q. In simple terms, what is "plant acquisition
20 adjustment"?

21 A. In simple terms, "plant acquisition adjustment"
22 is the difference between the total cost paid by
23 a utility for acquired property and the original
24 cost (less accumulated depreciation) to the
25 utility which had first devoted the subject

1 property to public service.

2

3 Q. What part of the Uniform System of Accounts
4 requires that the total purchase cost be
5 segregated between original cost and plant
6 acquisition adjustment?

7 A. The Uniform System of Accounts states that
8 Account 114--Electric Plant Acquisition
9 Adjustments. . . shall include the difference
10 between (1) the cost to the accounting utility
11 of electric plant acquired as an operating unit
12 or system by purchase, merger, consolidation,
13 liquidation, or otherwise and (2) the original
14 cost, estimated, if not known, of such property,
15 less the amount or amounts credited by the
16 accounting utility at the time of acquisition to
17 accumulated provisions for depreciation and
18 amortization and contributions in aid of
19 construction with respect to such property.

20

21 Q. Have you summarized the calculation of the plant
22 acquisition adjustment which is expected from
23 the purchase of Scherer Unit No. 4?

24 A. Yes, this is shown in Exhibit No. ____, Document
25 No. 1.

1 Q. Please describe the sources of the data
2 contained in your Document No. 1.

3 A. The source of the \$615,504,000 purchase price of
4 the undivided interest in Scherer Unit No. 4
5 shown on Line No. 1 is the letter of intent
6 dated July 30, 1990 between FPL and Georgia
7 Power (letter of intent). FPL estimates that
8 the cost of the unit will be increased by
9 approximately \$2,000,000 (shown on Line No. 2)
10 for legal, professional, and related costs
11 necessary to complete the transaction.

12

13 These amounts are reduced by \$1,117,312 (Line
14 No. 3) representing estimated depreciation
15 included in the charges to be paid by FPL in
16 connection with FPL's agreement to purchase 300
17 MW of unit power capacity from Georgia Power.
18 These credits are specified in the letter of
19 intent, and the UPS agreement with Georgia Power
20 begins November 1, 1990 and ends December 31,
21 1990. Thus, the amount deducted from the
22 purchase price represents depreciation charges
23 for two months. This brings the total estimated
24 cost of the unit to \$616,386,688 shown on Line
25 No. 4.

1 As shown on Line No. 5, Georgia Power's
2 estimated original cost of Scherer Unit No. 4 as
3 of the closing date is \$525,185,917. Arthur
4 Andersen & Co. personnel under my supervision
5 verified this amount by comparing to Georgia
6 Power's plant accounting records and budgeted
7 additions. Line No. 6 shows the estimated
8 accumulated depreciation as of each scheduled
9 closing date. These amounts were verified by
10 Arthur Andersen & Co. personnel under my
11 supervision by comparison to the balance shown
12 in Georgia Power's records as of July 31, 1990
13 and recalculation of the increases from that
14 date to the respective closing dates based upon
15 applicable depreciation rates. Line No. 7 shows
16 the amounts of fuel and other inventories to be
17 purchased by FPL as contemplated in the letter
18 of intent purchase price of \$615,504,000. The
19 inventory amounts represent an estimate of FPL's
20 purchased inventory based on its purchase
21 percentage of 25% of total Plant Scherer fuel at
22 January 1, 1991 and actual materials and
23 supplies inventories at December 31, 1989.
24 These amounts will be adjusted to the actual
25 inventory amounts which exist on the respective

1 closing dates. Finally, Line No. 8 shows the
2 adjustment to remove the deferred income taxes
3 applicable to the debt component of AFUDC which
4 Georgia Power had credited to the cost of the
5 plant during its construction. This adjustment
6 is necessary to conform the accounting for the
7 cost of the unit to the method followed by
8 companies subject to FPSC jurisdiction (i.e. to
9 conform net of tax to the gross method of
10 recording AFUDC), and the amounts were verified
11 to Georgia Power's records by Arthur Andersen &
12 Co. personnel under my supervision.

13
14 Line 10 shows the estimated plant acquisition
15 adjustment of \$111,362,307, representing the
16 difference between the purchase cost (Line No.
17 4) and the original cost (Line No. 9).

18
19 Q. What was the genesis of the requirement in the
20 Uniform System of Accounts to segregate original
21 cost and plant acquisition adjustments for
22 purchased utility property?

23 A. This requirement was adopted because of concerns
24 over inflated values of utility assets which
25 were constructed by or purchased from affiliates

1 or acquired through mergers and other
2 acquisitions as utility systems were being
3 developed in the late 19th century and the early
4 part of the 20th century. Such circumstances
5 called into question the reasonableness of
6 values which were in excess of original cost and
7 led to the present regulatory accounting
8 requirements.

9
10 Q. Is this a valid concern in the transaction with
11 Georgia Power?

12 A. No, as detailed in the testimony of Mr. Woody
13 and other FPL witnesses, FPL selected Georgia
14 Power's Scherer Unit 4 proposal as being
15 superior to other alternatives available to FPL
16 based on economic and other criteria. No
17 affiliation between FPL and Georgia Power
18 exists, and the Georgia Power proposal was
19 received at the time when FPL was considering
20 alternatives for expansion, including
21 cogeneration, purchased power, and construction.
22 Thus, the Georgia Power offer was received "in
23 competition" with other alternatives. FPL and
24 Georgia Power engaged in extensive arm's-length
25 negotiation to arrive at the terms of the

1 transaction. This should eliminate any concerns
2 over the reasonableness of the purchase price
3 for Scherer Unit No. 4.

4
5 Q. What regulatory accounting treatment does FPL
6 propose for the plant acquisition adjustment?

7 A. FPL proposes to record the plant acquisition
8 adjustment in Account 114--Electric Plant
9 Acquisition Adjustments as specified in the FERC
10 Uniform System of Accounts. The balance in this
11 account would be amortized to Account
12 406--Amortization of Electric Plant Acquisition
13 Adjustment over the depreciable life of the
14 unit.

15
16 Q. Does the Uniform System of Accounts expressly
17 provide for the amortization of plant
18 acquisition adjustments?

19 A. Yes, the Uniform System of Accounts provides in
20 the instructions to Account 114 that:

21 debit amounts recorded in this
22 account . . . may be amortized to
23 Account 425--Miscellaneous
24 Amortization over a period not
25 longer than the estimated

1 remaining life of the properties
2 to which such amounts relate.
3

4 These instructions further provide that should a
5 utility wish to account for debit amounts in
6 this account in any other manner, it shall
7 petition the Commission for authority to do so.
8

9 Account 425 is a "below the line" account which
10 is presumed to be excluded from revenue
11 requirement determinations. For this reason,
12 FPL is asking for approval to use Account 406.
13

14 Q. In other words, FPL is petitioning the
15 Commission to amortize the plant acquisition
16 adjustment "above the line"?

17 A. Yes, FPL is requesting that it be allowed to
18 include the amortization in operating expenses
19 as well as include the unamortized acquisition
20 adjustment in rate base, hereinafter referred to
21 as "rate base treatment."
22

23 Q. What should be the regulatory guidelines for
24 according rate base treatment of the amounts in
25 Account 114?

1 A. As in other cases where a commission determines
2 an investment in plant is prudent and
3 reasonable, the utility should be allowed to
4 both recover the capital invested in the plant
5 as well as earn a return on the value of the
6 plant.

7
8 Cost in excess of original cost should be free
9 from questions of propriety and prudence where
10 that cost arises from an arm's-length
11 transaction. Although the Uniform System of
12 Accounts requires a segregation of those costs
13 in excess of original cost, the entire cost
14 represents the actual cost of the plant, and
15 management is accountable for the entire cost.
16 More importantly, the prudence of an investment
17 does not depend simply on what the "original
18 cost" was to the selling company. Moreover, it
19 is conceivable that an investment made by
20 purchase from an affiliate could also be
21 reasonable and prudent where such a transaction
22 represents the most beneficial choice for
23 customers. In my judgment, if a company makes a
24 prudent investment, the entire cost of the
25 investment should be accorded rate base

1 treatment.

2

3 Q. Wouldn't it be good regulatory policy to signal

4 the need for restraint by excluding all--or some

5 portion--of the acquisition adjustment from rate

6 base?

7 A. No, where the utility has demonstrated (1) the

8 need for the facilities and (2) that the

9 purchased facility provides the greatest

10 customer benefit, a policy of disallowance of

11 plant acquisition adjustments would serve as a

12 disincentive for utility managers to make

13 prudent and reasonable decisions since they

14 would be denied an opportunity to earn a

15 reasonable return on total capital invested.

16

17 Q. What would be good regulatory policy?

18 A. Good regulatory policy would encourage utility

19 managers to make planning and operating

20 decisions designed to produce:

21 o Adequate public service

22 o The lowest long-run revenue requirement

23 o A reasonable return to investors

24 Good regulatory policy should be clear and

25 administered evenly. This is particularly

1 important in the case of planning for capacity
2 expansion which requires forecasts of both
3 demand and supply variables over many years.
4 Given the difficulty of estimating with
5 certainty the future values of these variables,
6 poor or uncertain regulatory policy would cause
7 additional difficulty and would not benefit the
8 customer.

9
10 Q. Where regulators allow rate base treatment of a
11 plant acquisition adjustment based in part on
12 economic benefits to customers, should not the
13 acquisition adjustment be subject to future
14 disallowance if the economic benefits disappear?

15 A. No, that kind of regulatory policy would be an
16 incentive for very short-run decisions.

17
18 Q. Please explain.

19 A. Few, if any, businesses have the planning
20 horizons required of utilities considering the
21 need for additional capacity. Such decisions
22 must be made prospectively, based upon the best
23 information available, but considering numerous
24 variables of both demand and supply. Capacity
25 decisions, once made (and executed), represent

1 substantial sunk costs. When made on the basis
2 of prudent, careful, and rigorous analysis of
3 all available information and best management
4 judgments, it would be patently unfair to deny
5 recovery of actual legitimate costs because one
6 or more of the planning variables turned out to
7 be different from the forecast. In such an
8 environment, there would be a strong incentive
9 to managers to minimize financial risk by
10 avoiding long-term commitments of capital
11 necessary to assure adequate capacity and lower
12 long-run costs.

13

14 Q. Has the Florida Public Service Commission
15 addressed the rate-making treatment of plant
16 acquisition costs in previous rulings?

17 A. Yes, although none of the cases of which I am
18 aware involved transactions of the magnitude of
19 the Scherer Unit No. 4 transactions, the
20 Commission has allowed recovery of and return on
21 acquisition adjustments where these plant
22 acquisition adjustment costs were not greater
23 than the benefits received by utilities'
24 customers.

25

1 Q. Have other state commissions followed similar
2 policies on acquisition adjustments?
3 A. Yes, as an example, the Indiana Utility
4 Regulatory Commission has addressed that
5 question in a case involving Indiana Gas Company
6 stating that:
7 certain criteria are generally
8 recognized as necessary in order
9 to justify. . . favorable
10 acquisition adjustment treatment
11 . . .
12 Those criteria include:
13 • The excess of purchased price over original
14 cost was paid as the result of an
15 arm's-length bargaining between
16 nonassociated buyer and seller; . . .
17 • The purchase necessitating the excess did
18 or reasonably should have resulted in
19 public benefit by improvement of service to
20 customers or in lowered rates or both
21 better service and lowered rates. (Indiana
22 Utility Regulatory Commission, Cause No.
23 38302, January 20, 1988, 89 PUR4th)
24
25 Q. What has been the FERC's position on this issue?

1 A. In its order in Dockets Nos. RP82-84-000,
2 RP83-45-000, and RP83-14-000 dated April 27,
3 1983, FERC stated:

4 The Commission has recognized
5 that a purchaser may include the
6 acquisition adjustment in its
7 rate base upon a showing that the
8 excess paid over the depreciated
9 original cost results in specific
10 dollar benefits to the pipeline's
11 customers. These benefits may
12 include "decreases in rates,
13 improved services or economies in
14 operation which are clearly
15 related and solely the result of
16 the acquisitions." Further, the
17 benefits must be tangible and
18 nonspeculative. (23 FERC P61,
19 151)
20

21 Q. Isn't it true that none of the regulatory
22 precedents you cite involved plant acquisition
23 adjustments of the magnitude of the Scherer Unit
24 No. 4 transaction?

25 A. Yes. It is true that neither the cases I cite

1 nor any of which I am aware involve acquisition
2 adjustments of this magnitude. I think it is
3 unlikely that regulatory authorities have had to
4 consider cases involving amounts this large or
5 transactions of this nature. For that matter,
6 transactions of this nature weren't contemplated
7 when regulatory authorities developed and
8 adopted the accounting requirements relating to
9 original cost and plant acquisition adjustments.

10

11 Q. Then of what relevance are these cases?

12 A. They are relevant insofar as these regulatory
13 authorities express a willingness to permit
14 recovery of and return on investments made which
15 produce benefits to utilities' customers greater
16 than alternative choices. In other words, the
17 right regulatory answer doesn't depend totally
18 on the regulatory accounting and reporting
19 requirements.

20

21 Ratepayers shouldn't be deprived of benefits of
22 better choices by utilities just because the
23 choice involves purchase of existing property.
24 The appropriate regulatory response should
25 provide an answer no different than when

1 considering choices among new construction
2 alternatives. And from the investors'
3 standpoint, the right answer should not depend
4 upon when the utility became the property's
5 owner.

6
7 Q. If the Commission allows FPL's request for rate
8 base treatment of the Scherer Unit No. 4 plant
9 acquisition adjustment, wouldn't it be a signal
10 encouraging widespread attempts by utilities to
11 recover inflated values paid to acquire utility
12 assets or businesses?

13 A. Only if the regulatory policy is misunderstood.
14 It should be remembered that the Uniform System
15 of Accounts requires specific authority from the
16 Commission for rate base treatment, a
17 requirement so well-established that it is
18 unlikely that such an attempt would escape
19 careful regulatory review. Each case would be
20 evaluated on its merits, and a clear statement
21 of regulatory policy should avoid any undue
22 misunderstanding.

23
24 Q. How does the evidence regarding the proposed
25 purchase of the Scherer Unit No. 4 by FPL relate

1 to the regulatory precedents you have outlined?
2
3 A. FPL witnesses have shown (1) the need for
4 additional capacity, (2) the proposed purchase
5 was negotiated at arm's-length, (3) the purchase
6 price is reasonable, and (4) the Scherer Unit
7 No. 4 purchase can be expected to provide
8 economic and other significant qualitative
9 benefits to FPL customers. This evidence
10 clearly shows that the rate-making treatment of
11 the Scherer Unit No. 4 plant acquisition
12 adjustment proposed by FPL is justified under
13 the regulatory precedents just outlined.
14
15 Q. Mr. Gower, do you believe that the evidence
16 regarding FPL's proposed purchase of Scherer
17 Unit No. 4 justifies favorable treatment of the
18 acquisition adjustment by the FPSC?
19 A. Yes, based on the testimony provided by FPL, I
20 believe that it has met the necessary standards
21 and that the Commission should allow favorable
22 rate-making treatment of the plant acquisition
23 adjustment--namely, inclusion in rate base and
24 amortization above the line.
25

- 1 Q. Does this conclude your testimony?
- 2 A. Yes, it does.

FLORIDA POWER & LIGHT COMPANY

CALCULATION OF THE PLANT ACQUISITION ADJUSTMENT EXPECTED
TO RESULT FROM THE PURCHASE OF AN UNDIVIDED INTEREST IN
SCHERER UNIT NO. 4

<u>Line No.</u>	<u>Description</u>	<u>Amount</u>
	COST OF ASSETS ACQUIRED:	
1	Purchase price	\$615,504,000
2	Estimated acquisition costs and expenses ..	2,000,000
3	Estimated UPS contract credits	<u>(1,117,312)</u>
4	Total estimated cost	<u>616,386,688</u>
	ORIGINAL COST OF ASSETS ACQUIRED:	
5	Original cost	525,185,917
6	Estimated accumulated depreciation	(69,418,682) (a)
7	Estimated fuel and materials inventories	21,650,366 (b)
8	Adjustment for income tax effect of the debt portion of AFUDC credited to plant cost by Georgia Power Company	<u>27,606,780</u>
9	Original cost of assets acquired	<u>505,024,381</u>
10	ESTIMATED ACQUISITION ADJUSTMENT	<u><u>\$111,362,307</u></u>

(a) Represents actual accumulated depreciation at July 31, 1990, increased by 2.75% annual depreciation to respective closing dates.

(b) Price of fuel and materials inventories to be adjusted to actual amounts at dates of closing.