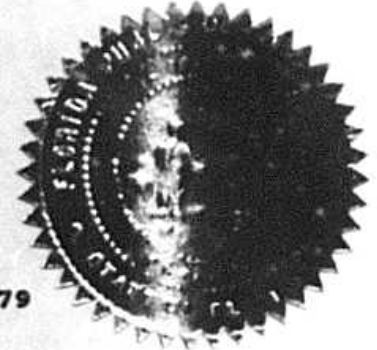


BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

 In the Matter of : DOCKET NO. 950001-EI
 :
 Fuel and Purchased Power :
 Cost Recovery Clause and :
 Generating Performance :
 Incentive Factor. :



VOLUME - 1
 Pages 1 through 179

PROCEEDINGS: HEARING

BEFORE: COMMISSIONER J. TERRY DEASON
 COMMISSIONER JOE GARCIA
 COMMISSIONER DIANE K. KIESLING

DATE: Wednesday, August 9, 1995

TIME: Commenced at 9:45 a.m.
 Concluded at 10:50 a.m.

PLACE: The Betty Easley Conference Center
 Hearing Room 148
 4075 Esplanade Way
 Tallahassee, Florida

REPORTED BY: ROWENA NASH HACKNEY
 Official Commission Reporter

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22

23

24

25

1 APPEARANCES CONTINUED:

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19

20

21

22

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25

I N D E X

WITNESSES - VOLUME 1

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EXHIBITS - VOLUME 1

	NUMBER		IDENTIFIED	ADMITTED
1	1	DPD-1	9	9
2	2	DPD-2	9	9
3	3	DPD-3	9	9
4	4	KHW-1	9	9
5	5	KHW-2	9	9
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8	8	BTB-1	9	9
9	9	BTB-2	9	9
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11	11	BTB-4	9	9
12	12	BTB-5	9	9
13	13	BTB-6	9	9
14	14	BTB-7	9	9
15	15	BTB-8	9	9
16	16	RS-1	9	9
17	17	RS-2	9	9
18	18	RS-3	9	9
19	19	CMM-1	9	9
20	20	MLG-1	9	9
21	21	MLG-2	9	9
22	22	MWH-1	9	9
23	23	SDC-1	9	9
24	24	SDC-2	9	9
25	25	GDF-1	9	9
26	26	GDF-2	9	9
27	27	MJP-1	9	9
28	28	MJP-2	9	9
29	29	MJP-3	9	9
30	30	GAK-1	9	9
31	31	GAK-2	9	9
32	32	GAK-3	9	9
33	33	WNC/EAT-1	9	9
34	34	WNC/EAT-2	9	9
35	35	WNC/EAT-3	9	9
36	36	WNC-1	9	9

P R O C E E D I N G S

(Hearing convened at 9:45 a.m.)

COMMISSIONER DEASON: Call the hearing to order.

Have the notice read, please.

MS. JOHNSON: By notice issued June 19, 1995, a hearing was set in Docket Nos. 950001-EI, Fuel and Purchased Power Cost Recovery Clause and Generating Performance Incentive Factor; in Docket No. 950007-EI, Environmental Cost Recovery Clause. The purpose of the hearing is set out in the notice.

COMMISSIONER DEASON: Okay. Now, as is evident from the Prehearing Orders that have been filed in these dockets, all issues have been stipulated.

MS. JOHNSON: That's correct.

COMMISSIONER DEASON: Okay. For purposes of appearances, I think it would just suffice to show that all the appearances that were taken at the prehearing conference would just be recognized for purposes of this hearing, realizing that the participants have been excused from actually making an appearance and presenting their witnesses; is that correct?

MS. JOHNSON: That's correct.

COMMISSIONER DEASON: I suppose the first order of business would be to identify all of the exhibits which have been preliminarily identified in the Prehearing Orders.

1 MS. JOHNSON: That's correct. I handed out this
2 morning a revised Page 26, which should be inserted in the
3 Prehearing Order for Docket No. 950001. One of the exhibits
4 was inadvertently omitted. With that revision, there are 36
5 exhibits starting with DPD-1.

6 COMMISSIONER DEASON: Okay. And that would conclude
7 with WNC-1 on Page 31 of the Prehearing Order; is that
8 correct?

9 MS. JOHNSON: That's correct.

10 COMMISSIONER DEASON: So for purposes of
11 identification, we'll show that those exhibits, which are
12 identified in the Prehearing Order for Docket 950001, as being
13 identified as Exhibits 1 through 36.

14 MS. JOHNSON: Staff would request that those
15 exhibits be inserted into the record along with the testimony
16 that was prefiled by the witnesses.

17 COMMISSIONER DEASON: The witnesses are identified
18 on Pages 5 and 6 on the Prehearing Order, and Staff is now
19 moving that the testimony of all of those witnesses, prefiled
20 testimony, be inserted into the record. And without
21 objection, that is done. All of that testimony has been
22 stipulated.

23 And Staff is likewise moving that the exhibits which
24 have just been identified as Exhibits 1 through 36, likewise
25 be admitted. And those exhibits have been stipulated and show

FLORIDA POWER CORPORATION

10

DOCKET NO. 950001-EI

**Re: Fuel Cost Recovery and
Capacity Cost Recovery
Final True-up Amounts for
October 1994 through March 1995**

**DIRECT TESTIMONY OF
DAVID P. DEVELLE**

1 Q. Please state your name and business address.

2 A. My name is David P. Develle. My business address is P. O. Box 14042,
3 St. Petersburg, Florida 33733.

4

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

6 A. I am employed by Florida Power Corporation as Director, Regulatory
7 Accounting.

8

9 Q. Would you please describe your educational background and work
10 experience?

11 A. I graduated from the University of South Florida in 1975 with a Bachelor's
12 Degree in Business Administration, majoring in Accounting. In 1989, I
13 graduated from the University of Tampa with a Master's Degree in
14 Business Administration. I began my employment with Florida Power in
15 1975. In addition to various staff accounting positions within the
16 Controllers department, I have held the following supervisory positions:
17 Manager of Accounting Research and Analysis, Manager of Regulatory
18 Accounting and Financial Reporting, and Director of Regulatory

1 Accounting. My responsibilities in these positions included maintenance
2 of the general records of the Company, fuel accounting, plant and
3 depreciation accounting, financial and regulatory reporting, and
4 preparation and/or coordination of all accounting schedules required in the
5 Company's base rate proceedings before the Florida Public Service
6 Commission (FPSC) and the Federal Energy Regulatory Commission
7 (FERC). I have attended a variety of courses on management and finance
8 sponsored by the Company, the Edison Electric Institute and others. In
9 addition, I currently serve on the Accounting Standards Committee of the
10 Edison Electric Institute.

11
12 **Q. What is the purpose of your testimony?**

13 A. The purpose of my testimony is to describe the Company's Fuel Cost
14 Recovery Clause final true-up amount for the period of October 1994
15 through March 1995, and the Company's Capacity Cost Recovery Clause
16 final true-up amount for the same period.

17
18 **Q. Have you prepared exhibits to your testimony?**

19 A. Yes, I have prepared a three-page true-up variance analysis which
20 examines the difference between the estimated fuel true-up and the actual
21 period-end fuel true-up. This variance analysis is attached to my prepared
22 testimony and designated exhibit (DPD-1). Also attached to my prepared
23 testimony and designated exhibit (DPD-2) are the Capacity Cost Recovery
24 Clause true-up calculations for the October 1994 through March 1995
25 period. Also, I will sponsor the applicable Schedules A1 through A12 for

1 the month of March 1995 (period-to-date), which have been previously
2 filed with the Commission and are also attached to my prepared testimony
3 for ease of reference and designated as exhibit (DPD-3).
4

5 **Q. What is the source of the data which you will present by way of**
6 **testimony or exhibits in this proceeding?**

7 **A. Unless otherwise indicated, the actual data is taken from the books and**
8 **records of the Company. The books and records are kept in the regular**
9 **course of business in accordance with generally accepted accounting**
10 **principles and practices, and provisions of the Uniform System of**
11 **Accounts as prescribed by this Commission.**
12

13 **FUEL COST RECOVERY**

14

15 **Q. What is the Company's jurisdictional ending balance as of March 31,**
16 **1995 for fuel cost recovery?**

17 **A. The actual ending balance as of March 31, 1995 for true-up purposes is**
18 **an over-recovery of \$8,270,052.**
19

20 **Q. How does this amount compare to the Company's estimated ending**
21 **balance to be included in the April through September 1995 period?**

22 **A. When the estimated over-recovery of \$10,291,176 to be refunded during**
23 **the period of April through September 1995 is taken into account, the**
24 **final true-up ending balance attributable to the six month period ended**
25 **March 1995 period is an under-recovery of \$2,021,124.**

1 Q. How was the final true-up ending balance determined?

2 A. The amount was determined in the manner set forth on Schedule A2 of
3 the Commission's standard forms previously submitted by the Company
4 on a monthly basis.

5
6 Q. What factors contributed to the period-ending jurisdictional over-recovery
7 of \$8.3 million as shown on exhibit (DPD-1)?

8 A. The factors contributing to the over-recovery are summarized on Sheet 1
9 of 3. The actual jurisdictional kwh sales were lower than the original
10 estimate by 510,027,184 kwh. This decrease in kwh sales, attributable
11 to mild weather, resulted in lower jurisdictional revenues of \$11.5 million
12 and also accounted for approximately \$10 million of the total \$22.3
13 million favorable variance in jurisdictional fuel and purchased power
14 expense. The remaining \$12.3 million favorable variance in fuel expense
15 can be primarily attributable to price.

16
17 When these differences in jurisdictional revenues and jurisdictional fuel
18 expenses are combined, the net result is a over-recovery of \$10.8 million
19 related to the October 1994 through March 1995 time period. Other
20 variances not directly related to the period, including an interest provision
21 of \$.3 million, result in the actual ending balance over-recovery of \$8.3
22 million, as of March 31, 1995.

1 Q. Please explain the components shown on exhibit (DPD-1), Sheet 2 of 3
2 which produced the \$22.5 million favorable system variance from the
3 projected cost of fuel and net purchased power transactions.

4 A. Sheet 2 of 3 of my exhibit (DPD-1) shows an analysis of the system
5 variance for each energy source in terms of three interrelated components:
6 (1) changes in the amount (Mwh's) of energy required; (2) changes in the
7 heat rate, or efficiency, of generated energy (BTU's per Kwh); and (3)
8 changes in the unit price of either fuel consumed for generation (\$ per
9 million BTU) or energy purchases and sales (cents per Kwh).

10
11 Q. What effect did these components have on the system fuel and net power
12 variance for the true-up period?

13 A. As can be seen from Sheet 2 of 3, variances in the amount of MWH
14 requirements from each energy source (column B) combined to produce
15 a cost decrease of \$10.5 million. I will discuss this component of the
16 variance analysis in greater detail below.

17
18 The heat rate variance for each source of generated energy (column C)
19 produced a net cost increase of \$2.4 million. Higher than anticipated heat
20 rates for oil generating units were the largest component of the cost
21 variance. On the Company's Schedule A3, exhibit (DPD-3), all BTU's for
22 light oil are included in the light oil heat rate computation. However since
23 no Kwh generation is associated with light oil consumed at steam plants,
24 the resulting heat rate shown on A3 is distorted. In order to compute the

1 true heat rate variance, light oil consumed at steam units is shown
2 separately on line 23 of Sheet 2 of 3 of exhibit (DPD-1).

3
4 A cost decrease of \$14.4 million resulted from the price variance
5 (column D), which was caused by a number of factors detailed on lines 1
6 through 25 of Sheet 2 of 3, of exhibit(DPD-1). The most significant
7 factors contributing to the favorable variance were a lower cost per
8 mmbtu for coal and reduced energy payments to QF's partially offset by
9 reduced prices for economy sales and supplemental sales.

10
11 **Q. Please explain the analysis shown on Sheet 3 of 3 of your exhibit (DPD-1)**

12 **A. The analysis on Sheet 3 of 3 attempts to identify the effect that**
13 **generation mix has on total net system fuel and purchased power cost.**
14 **Although this interrelationship is generally understood to exist, it is not**
15 **readily apparent from the individual variances contained in the FPSC "A"**
16 **Schedules or in the analysis presented on Sheet 2 of 3. For example, an**
17 **increase in the Mwh requirements of nuclear generation shows up on**
18 **Schedule A3 and on Sheet 2 of my exhibit as a cost increase of \$.5**
19 **million. While this may be correct in isolation, the true effect of increased**
20 **nuclear generation is obviously a corresponding decrease in the MWH**
21 **requirements of a number of other more costly energy sources, primarily**
22 **coal and light oil. The result is a lower net system cost of \$1.4 million**
23 **even if total system MWH requirements remain unchanged.**

1 In addition to the effect of variances in generation mix, this analysis also
2 attempts to identify the independent effect of the net variance in total
3 system Mwh requirements from all energy sources combined (internal and
4 external). In this true-up period, for example, total system requirements
5 were lower than the original forecast by 420,000 MWH. This would have
6 led to lower net costs of \$7.6 million even if the mix of generation had
7 not changed, since the lower system load decreases coal generation at a
8 cost above the system average.

9
10 **Q. Please explain how this analysis was performed.**

11 **A.** The analysis on Sheet 3 of 3 is made in two steps. The first, captioned
12 "MWH RECONCILIATION," allocates the MWH variances for the individual
13 energy sources shown in column B among the primary causal variances
14 in columns C through H. Since the causal variances identified in this
15 analysis are not all inclusive, the amount of any residual over- or under-
16 allocation is shown in column I, "Unallocated Variances." The second
17 step, captioned "COST RECONCILIATION," assigns a dollar value to the
18 MWH variances identified in step 1. This is done by allocating the cost
19 variances identified in column B of Sheet 2 for each energy source (and
20 shown again in column B of Sheet 3) among the causal variances based
21 on the MWH's allocated to each in step 1. As mentioned above, the
22 allocation of individual MWH and cost variances to the various causes of
23 those variances is not intended to be all inclusive or precise. It is intended
24 to be a representative approximation of the exceedingly complex cause

1 and effect relationship existing among the individual and total MWH
2 variances and their related cost variances.

3
4 **Q. What were the major contributors to the \$10.5 million cost decrease**
5 **associated with the variance in MWH requirements?**

6 **A. Lower than expected system requirements during the period accounted for**
7 **\$7.6 million of the favorable variance and the continued high capacity**
8 **factor at Crystal River Unit No. 3 accounted for \$1.4 million of the**
9 **favorable variance.**

10
11 **Q. Has Florida Power confirmed the validity of using the "short cut" method**
12 **of determining the equity component of EFC's capital structure for**
13 **calendar year 1994?**

14 **A. Yes. Florida Power's Audit Services department has reviewed the analysis**
15 **performed by Electric Fuels Corporation (EFC). The revenue requirements**
16 **under a full utility-type regulatory treatment methodology using the actual**
17 **weighted average cost of debt and equity required to support Florida**
18 **Power business was compared to revenues billed using equity based on**
19 **55% of net long term assets (short cut method). The analysis showed**
20 **that for 1994, the short cut method resulted in revenues of**
21 **\$250,387,419 which were \$126,620 or .051% lower than revenues**
22 **under the full utility-type regulatory treatment methodology. Florida**
23 **Power continues to believe that this analysis confirms the appropriateness**
24 **of the short cut method.**

CAPACITY COST RECOVERY

1
2
3 **Q. What is the Company's jurisdictional ending balance as of March 31,**
4 **1995 for capacity cost recovery?**

5 **A. The actual ending balance as of March 31, 1995 for true-up purposes is**
6 **an under-recovery of \$4,061,575.**

7
8 **Q. How does this amount compare to the Company's estimated ending**
9 **balance to be included in the April through September 1995 period?**

10 **A. When the estimated under-recovery of \$3,572,022 to be recovered during**
11 **the period of April through September 1995 is taken into account, the**
12 **final true-up ending balance attributable to the six month period ended**
13 **March 1995 period is an under-recovery of \$489,553.**

14
15 **Q. Is this true-up calculation consistent with the true-up methodology used**
16 **for the other cost recovery clauses?**

17 **A. Yes it is. The calculation of the final net true-up amount follows the**
18 **procedures established by this Commission as set forth on FPSC Schedule**
19 **A2 "Calculation of True-Up and Interest Provision" for the Fuel Cost**
20 **Recovery Clause.**

21
22 **Q. What factors contributed to the actual period-end under-recovery of \$4.1**
23 **million?**

24 **A. Exhibit (DPD-2), sheet 1 of 3, entitled "Capacity Cost Recovery/Summary**
25 **of Actual True-Up Amount", compares the summary items from sheet 2**

1 of 3 to the original forecast for the period. As can be seen from sheet 1,
2 actual jurisdictional capacity cost revenues were \$1.1 million lower than
3 forecast due to lower residential Kwh sales during the period.
4 Jurisdictional capacity costs were \$3.1 million higher than forecast. The
5 major factor contributing to this variance was higher than forecast
6 payments to Orlando Cogen.

7

8 Q. Does this conclude your testimony?

9 A. Yes, it does.

FLORIDA POWER CORPORATION**DOCKET NO. 950001-EI****Levelized Fuel and Capacity Cost Factors
October 1995 through March 1996****DIRECT TESTIMONY OF
KARL H. WIELAND**

1 Q. Please state your name and business address.

2 A. My name is Karl H. Wieland. My business address is Post Office Box
3 14042, St. Petersburg, Florida 33733.

4

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

6 A. I am employed by Florida Power Corporation as Director of Business
7 Planning.

8

9 Q. Have the duties and responsibilities of your position with the
10 Company remained the same since you last testified in this
11 proceeding?

12 A. Yes.

13

14 Q. What is the purpose of your testimony?

15 A. The purpose of my testimony is to present for Commission approval
16 the Company's levelized fuel and capacity cost factors for the period
17 of October 1995 through March 1996.

1 Q. Do you have an exhibit to your testimony?

2 A. Yes. I have prepared an exhibit attached to my prepared testimony
3 consisting of Parts A through D and the Commission's minimum filing
4 requirements for these proceedings, Schedules E1 through E11 and
5 H1, which contain the Company's levelized fuel cost factors and the
6 supporting data. Parts A through C contain the assumptions which
7 support the Company's cost projections, Part D contains the
8 Company's capacity cost recovery factors and supporting data.

9
10 **FUEL COST RECOVERY**

11 Q. Please describe the levelized fuel cost factors calculated by the
12 Company for the upcoming projection period.

13 A. Schedule E1 (Basic), page 1 of the "E" Schedules in my exhibit,
14 shows the calculation of the Company's basic fuel cost factor of
15 1.783 ¢/kwh (before line loss adjustment). The basic factor consists
16 of a fuel cost for the projection period of 1.7068 ¢/kwh (adjusted for
17 jurisdictional losses), a GPIF reward of .00133 ¢/kwh, a coal market
18 price true-up credit of 0.0036 ¢/kwh and an estimated prior period
19 true-up charge of 0.0771 ¢/kwh.

20
21 Utilizing this basic factor, Schedule E1-D (Levelized) shows the
22 calculation and supporting data for the Company's levelized fuel cost
23 factors for secondary, primary, and transmission metering tariffs. To
24 accomplish this calculation, effective jurisdictional sales at the
25 secondary level are calculated by applying 1% and 2% metering

1 reduction factors to primary and transmission sales (forecasted at
2 meter level). This is consistent with the methodology being used in
3 the development of the capacity cost recovery factors.

4
5 Schedule E1-E (Final) develops the TOU multipliers 1.223 On-peak
6 and 0.909 Off-peak. The levelized fuel cost factors (by metering
7 voltage) are then multiplied by the TOU multipliers, which results in
8 the final fuel factors to be applied to customer bills during the
9 projection period. The final fuel cost factor for residential service is
10 1.786 ¢/kwh.

11
12 **Q. What is included in Schedule E1, line 4, "Adjustments to Fuel Cost"?**

13 **A. Line 4 shows costs for the conversion of two Intercession City**
14 **combustion turbine units to burn natural gas instead of distillate fuel**
15 **oil. The rationale for including these costs is presented later in my**
16 **testimony.**

17
18 **Q. What is included in Schedule E1, line 6, "Energy Cost of Purchased**
19 **Power"?**

20 **A. Line 6 includes energy costs for the purchase of 50 MWs from**
21 **Tampa Electric Company and the purchase of 407 MWs under a Unit**
22 **Power Sales (UPS) agreement with the Southern Company. Capacity**
23 **costs for these purchases are included in the capacity cost recovery**
24 **factor. Both of these contracts have been in place and have been**
25 **approved for cost recovery by the Commission.**

1 Q. What is included in Schedule E1, line 8, "Energy Cost of Economy
2 Purchases (Non-Broker)"?

3 A. Line 8 includes energy costs for purchases from Seminole Electric
4 Cooperative (SECI) for load following, off-peak hydroelectric
5 purchases from the Southeast Electric Power Agency (SEPA), and
6 miscellaneous economy purchases from within or outside the state
7 which are not made through the Florida Broker System. The SECI
8 contract is an ongoing contract under which the Company purchases
9 energy from SECI at 95% of its avoided fuel cost. Purchases from
10 SEPA are on an as-available basis. There are no capacity payments
11 associated with either of these purchases. Other purchases may
12 have non-fuel charges, but since such purchases are made only if the
13 total cost of the purchase is lower than the Company's cost to
14 generate the energy, it is appropriate to recover the associated non-
15 fuel costs through the fuel adjustment clause rather than the capacity
16 cost recovery factor.

17
18 Q. Please explain the entry on Schedule E1, line 17, "Fuel Cost of
19 Supplemental Sales."

20 A. The Company has a wholesale contract with Seminole for the sale of
21 supplemental energy to supply the portion of their load in excess of
22 665 MW. The fuel costs charged to Seminole for these supplemental
23 sales are calculated on a "stratified" basis, in a manner which
24 recovers the higher cost of intermediate/peaking generation used to
25 provide the energy. The Company also has wholesale contracts with

1 the municipal utilities of Kissimmee and St. Cloud under which fuel
2 costs are charged in a similar manner. Unlike interchange sales, the
3 fuel costs of wholesale sales are normally included in the total cost
4 of fuel and net power transactions used to calculate the average
5 system cost per kwh for fuel adjustment purposes. However, since
6 the fuel costs of the supplemental sales are not recovered on an
7 average cost basis, an adjustment has been made to remove these
8 costs and the related kwh sales from the fuel adjustment calculation
9 in the same manner that interchange sales are removed from the
10 calculation. This adjustment is necessary to avoid an over-recovery
11 by the Company which would result from the treatment of these fuel
12 costs on an average cost basis in this proceeding, while actually
13 recovering the costs from the supplemental customers on a higher,
14 stratified cost basis. The development of this adjustment is shown
15 on Schedule E6.

16
17 **Q. How was the estimated true-up shown on line 28 of Schedule E1**
18 **developed?**

19 **A.** The total true-up amount was determined in two parts. First, a
20 period-to-date actual over-recovery of \$13,441,514 through April
21 1995 was obtained from Schedule A2, page 3 of 4, previously
22 submitted for the month of April. This balance was projected to the
23 end of September 1995, including interest estimated at the April
24 ending rate of 0.5058% per month. The development of the
25 estimated true-up amount for the current April through September

1 1995 period is shown on Schedule E1B, Sheet 1. Second, the total
2 estimated under-recovery of \$8,628,315 for the current period was
3 combined with the prior period (October 1994 through March 1995)
4 over-recovery of \$8,270,063 and \$10,291,176 being refunded
5 during the current period for a total under-recovery of \$10,649,438
6 at the end of September 1995. This results in an estimated true-up
7 charge on line 28 of Schedule E1 of 0.0771 ¢/kwh for application in
8 the October 1995 through March 1996 projection period.

9
10 **Q. What are the primary reasons for the projected September 1995**
11 **under-recovery of \$10.6 million?**

12 **A. The under-recovery is primarily a result of higher oil prices, higher**
13 **costs of purchased power, and significantly higher system**
14 **requirements during the early months of the current period.**

15
16 **Q. How was the market price true-up for Powell Mountain coal**
17 **purchases (Schedule E1, line 28a) calculated?**

18 **A. The calculation was performed in accordance with the market pricing**
19 **methodology approved by the Commission for Powell Mountain coal**
20 **purchases in Docket No. 860001-EI-G and has been made available**
21 **for Staff review. The true-up is based on the difference between the**
22 **previously recovered cost of Powell Mountain coal purchases during**
23 **1993, and a calculated cost using the market price index for**
24 **compliance coal in BOM District 8 for 1994, as adopted in Order No.**
25 **22401. The true-up amount of \$503,961 includes a correction from**

1 1992 for a delivery not previously accounted for, and interest through
2 April 1995.

3
4 **Q. Please explain the procedure for forecasting the unit cost of nuclear
5 fuel.**

6 **A. The cost per million BTU of the nuclear fuel which will be in the
7 reactor during the projection period (primarily Cycle 10), was
8 developed from the projected cost of fuel added during the current
9 period's refueling outage and the unamortized investment cost of the
10 fuel remaining in the reactor from the prior cycle (Cycle 9). Cycle 10
11 consists of several "batches," of fuel assemblies which are separately
12 accounted for throughout their life in several fuel cycles. The cost for
13 each batch is determined from the actual cost incurred by the
14 Company, which is audited and reviewed by the Commission's field
15 auditors. The expected available energy from each batch over its life
16 is developed from an evaluation of various fuel management schemes
17 and estimated fuel cycle lengths. From this information, a cost per
18 unit of energy (cents per million BTU) is calculated for each batch.
19 However, since the rate of energy consumption is not uniform among
20 the individual fuel assemblies and batches within the reactor core, an
21 estimate of consumption within each batch must be made to properly
22 weigh the batch unit costs in calculating a composite unit cost for the
23 overall fuel cycle.**

- 1 Q. How was the rate of energy consumption for each batch within Cycle
2 10 estimated for the upcoming projection period?
- 3 A. The consumption rate of each batch has been estimated by utilizing
4 a core physics computer program which simulates reactor operations
5 over the projection period. When this consumption pattern is applied
6 to the individual batch costs, the resultant composite Cycle 10 is
7 \$0.37 per million BTU.
8
- 9 Q. Would you give a brief overview of the procedure used in developing
10 the projected fuel cost data from which the Company's basic fuel
11 cost recovery factor was calculated?
- 12 A. Yes. The process begins with the fuel price forecast and the system
13 sales forecast. These forecasts are input into PROMOD, along with
14 purchased power information, generating unit operating
15 characteristics, maintenance schedules, and other pertinent data.
16 PROMOD then computes system fuel consumption, replacement fuel
17 costs, and energy purchases and costs. This data is input into a fuel
18 inventory model, which calculates average inventory fuel costs. This
19 information is the basis for the calculation of the Company's leveled
20 fuel cost factors and supporting schedules.
21
- 22 Q. What is the source of the system sales forecast?
- 23 A. The system sales forecast is made by the Forecasting section of the
24 Business Planning Department using the most recently available data.
25 The forecast used for this projection period was prepared in June

1 1994. The forecasted sales are shown on Schedule E11, and contain
2 the energy reductions expected to result from the energy
3 conservation programs being implemented by the Company.

4
5 **Q. Is the methodology used to produce the sales forecast for this**
6 **projection period the same as previously used by the Company in**
7 **these proceedings?**

8 **A. The methodology employed to produce the forecast for the projection**
9 **period is the same as used in the Company's most recent filings, and**
10 **was developed with a hybrid econometric/end-use forecasting model.**
11 **The forecast assumptions are shown in Part A of my exhibit.**

12
13 **Q. What is the source of the Company's fuel price forecast?**

14 **A. The fuel price forecast was made by the Fuel and Special Projects**
15 **Department based on forecast assumptions for residual oil, #2 fuel**
16 **oil, natural gas, and coal. The assumptions for the projection period**
17 **are shown in Part B of my exhibit. The forecasted prices for each**
18 **fuel type are shown in Part C.**

19
20 **Q. Please explain the basis for requesting recovery of the cost of**
21 **converting combustion turbine units 7 and 9 at the Intercession City**
22 **site to burn natural gas.**

23 **A. In Docket No. 850001-EI-B, Order No. 14546 issued on July, 1985,**
24 **the Commission addressed charges appropriate for recovery through**
25 **the fuel clause:**

1 "Fossil fuel-related costs normally recovered through
2 base rates but which were not recognized or
3 anticipated in the cost levels used to determine
4 current base rates and which, if expended, will result
5 in fuel savings to customers. Recovery of such
6 costs should be made on a case by case basis after
7 Commission approval."
8

9 The gas conversion cost of \$2.2 million was clearly not part of
10 the cost of Intercession City units 7 and 9 when they were
11 included in rate base as part of the 1993 test year. In addition, a
12 one-time payment of \$272,000 for gas metering costs is a
13 transportation related cost which we believe is recoverable as a
14 fuel expense. The anticipated fuel savings from the conversion are
15 in excess of \$20 million.
16

17 **Q. How is FPC proposing to recover the conversion cost?**

18 **A.** The Company proposes to amortize the \$2.2 million conversion
19 cost over a five year period beginning with the plant in-service
20 date of July, 1995. The one-time metering expense will be
21 recognized in the first month of amortization. The projected cost
22 during the October 1995 through March 1996 period is \$337,518
23 which consists of an amortization charge of \$221,154 and a
24 return (including income taxes) of \$116,364 based on the
25 Company's current cost of capital of 8.37%. The fuel savings for

1 the same period are expected to be \$1,077,438 resulting in a net
2 benefit to customers of \$739,920. During the July through
3 September, 1995 period, costs (including the \$272,000 metering
4 charge) are \$416,370 compared to savings of \$611,983 for a net
5 benefit of \$195,613.

6
7 **Q. Why is the Company proposing a five year amortization period**
8 **rather than expensing the conversion cost or depreciating it over**
9 **the life of the units?**

10 **A. The Company chose five years in order to align recovery of cost**
11 **with anticipated benefits. The Company is relying on the**
12 **availability of interruptible gas transportation for the delivery of**
13 **gas to the site because firm (take or pay) contracts are not**
14 **economical for a low capacity factor peaking site. Discussions**
15 **with Florida Gas Transmission (FGT) indicate that they expect**
16 **interruptible gas to be available in sufficient quantity to power the**
17 **two units at the site for the next five years. The Company hopes**
18 **that some gas will be available beyond that time which will yield**
19 **additional savings, but we believe it more appropriate to recover**
20 **costs during the time when the majority of benefits are expected**
21 **to occur. Expensing the conversion cost would burden existing**
22 **customers with costs that exceed benefits while amortizing the**
23 **conversion over the life of the units could burden future**
24 **customers with costs that do not have corresponding benefits.**

1 Q. What is the Company proposing to do if expected fuel savings are
2 not achieved?

3 A. The Company is willing to assume the risk for achieving fuel
4 savings. If fuel savings during any six-month fuel recovery period
5 are less than the amortization and return costs, we will limit cost
6 recovery to fuel savings and defer recovery of the difference to
7 future periods. In no case will the Company collect an amount
8 greater than the fuel savings, making this a no-lose proposition for
9 customers.

11 CAPACITY COST RECOVERY

12 Q. How was the Capacity Cost Recovery factor developed?

13 A. The calculation of the capacity cost recovery factor (CCRF) is
14 shown in Part D of my exhibit. The factor allocates capacity
15 costs to rate classes in the same manner that they would be
16 allocated if they were recovered in base rates. A brief explanation
17 of the schedules in the exhibit follows.

18
19 Sheet 1: Projected Capacity Payments. This schedule contains
20 system capacity payments for UPS, TECO and QF purchases. The
21 retail portion of the capacity payments are calculated using
22 separation factors consistent with the Company's rate case filing.
23 The estimated recoverable capacity payments for the October
24 1995 through March 1996 period are \$122,003,909.

1 Sheet 2: Estimated/Actual True-Up. This schedule presents the
2 actual ending true-up balance after one month of the current
3 period and re-forecasts the over/(under) recovery balances for the
4 next five months to obtain an ending balance for the current
5 period. This estimated/actual balance of \$(611,949) is then
6 carried forward to Sheet 1, to be collected during the October
7 1995 through March 1996 period.

8
9 Sheet 3: Development of Jurisdictional Loss Multipliers: The
10 same delivery efficiencies and loss multipliers as presented on
11 Schedule E1-F.

12
13 Sheet 4: Calculation of 12 CP and Annual Average Demand. The
14 calculation of average 12 CP and annual average demand is based
15 on 1994 load research data and the delivery efficiencies on Sheet
16 3.

17
18 Sheet 5: Calculation of Capacity Cost Recovery Factors. The
19 total demand allocators in column (7) are computed by adding
20 12/13 of the 12 CP demand allocators to 1/13 of the annual
21 average demand allocators. The CCRF for each secondary delivery
22 rate class in cents per kwh is the product of total jurisdictional
23 capacity costs (including revenue taxes) from Sheet 1, times the
24 class demand allocation factor, divided by projected effective
25 sales at the secondary level. The CCRF for primary and

1 transmission rate classes reflect the application of metering
2 reduction factors of 1% and 2% from the secondary CCRF.

3
4 **Q. Please discuss the increase in capacity payments compared to the**
5 **prior six- month period.**

6 **A. The increase in capacity payments from \$129.7 million in the**
7 **April through September 1995 period to \$138.2 million for the**
8 **October 1995 through March 1996 period is due to two factors.**
9 **First, two contracts (Eco Peat and Orange Cogen) began during**
10 **the April through September period, but will be in effect for the**
11 **entire six months in the projection period. Second, the escalation**
12 **provisions in most contracts take effect in January, 1996.**

13
14 **Q. What does line 19, Eco Peat lease credit, represent?**

15 **A. This credit is a result of negotiations between the Company and**
16 **Eco Peat to allow the Eco Peat facility and its power sales**
17 **contract to become part of the General Peat facility. The credit**
18 **consists of two parts: a fixed payment of \$800,000 per year (paid**
19 **monthly) which Eco peat would have paid in order to lease the**
20 **Avon Park steam site, and a share of the actual profit for Eco**
21 **Peat, estimated to \$150,000, payable in January of 1996. FPC**
22 **feels that since customers are paying capacity charges for this**
23 **contract, it is appropriate to reduce capacity charges by these**
24 **credits.**

1 Q. Does this conclude your testimony?

2 A. Yes.

FLORIDA POWER CORPORATION**DOCKET No. 950001-EI****GPIF Targets and Ranges for
October 1995 through March 1996****DIRECT TESTIMONY OF
LARRY G. TURNER**

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

2 **A. My name is Larry G. Turner. My business address is Post Office Box**
3 **14042, St. Petersburg, Florida 33733.**

4

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

6 **A. I am employed by Florida Power Corporation as Senior Performance**
7 **Engineer.**

8

9 **Q. Have the duties and responsibilities of your position with the Company**
10 **remained the same since you last testified in this proceeding?**

11 **A. Yes, they have.**

12

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

1 A. The purpose of my testimony is to present the development of the
2 Company's Generating Performance Incentive Factor (GPIF) targets and
3 ranges for the period of October 1995 through March 1996. This
4 development includes the targets and improvement/degradation ranges
5 for unit equivalent availability and unit average net operating heat rate
6 in accordance with the Commission's Generating Performance Incentive
7 Implementation Manual.

8
9 Q. Do you have an exhibit to your testimony?

10 A. Yes, I will sponsor an exhibit containing 76 pages, which consists of
11 the GPIF standard form schedules prescribed in the Implementation
12 Manual and supporting data, including unplanned outage rates, net
13 operating heat rates, and computer analyses and graphs for each of the
14 individual GPIF units, all of which are attached to my prepared
15 testimony.

16
17 Q. Which of the Company's generating units have you included in the GPIF
18 program for the upcoming projection period?

19 A. We have included the same units as were included for the current
20 period, Crystal River Units 1 through 5 and Anclote Units 1 and 2.

1 Q. Have you determined the equivalent availability targets and
2 improvement/degradation ranges for the Company's GPIF units?

3 A. Yes, I have. This information is included in the Target and Range
4 Summary on page 3 of my exhibit.
5

6 Q. How were the equivalent availability targets developed?

7 A. The equivalent availability targets were developed using the
8 methodology established for the Company's GPIF units, as set forth in
9 Section 4 of the Implementation Manual. This method describes the
10 formulation of graphs based on each unit's historic performance data
11 for the four individual unplanned outage rates (i.e. forced, partial
12 forced, maintenance and partial maintenance outage rates), which in
13 combination constitute the unit's equivalent unplanned outage rate
14 (EUOR). From operational data and these graphs, the individual target
15 rates are determined by inspecting two years of twelve-month rolling
16 averages and the scatter of monthly data points during the two-year
17 period. The unit's four target rates are then used to calculate its
18 unplanned outage hours for the projection period. When the unit's
19 projected planned outage hours are taken into account, the hours
20 calculated from these individual unplanned outage rates can then be
21 converted into an overall equivalent unplanned outage factor (EUOF).
22 Because factors are additive (unlike rates), the unplanned and planned

1 outage factors (EUOF and POF) when added to the equivalent
2 availability factor (EAF) will always equal 100%. For example, an
3 EUOF of 15% and a POF of 10% results in an EAF of 75%.

4
5 The supporting graphs and a summary table of all target and range
6 rates are contained in the section of my exhibit entitled "Unplanned
7 Outage Rate Tables and Graphs".

8
9 **Q. What is the target equivalent availability factor for Crystal River 3?**

10 **A. The EAF target for Crystal River Unit 3 is 79.79%. The unit's next**
11 **mid-cycle outage is scheduled to begin February 23, and continue**
12 **through April 15, resulting in a Winter period POF of 17.48%. The**
13 **unit's EUOR target is 3.30, which results in an EUOF of 2.27% when**
14 **planned outage hours are taken into account.**

15
16 **Q. Please describe the method utilized in the development of the**
17 **improvement/degradation ranges for each GPIF unit's availability**
18 **targets.**

19 **A. In general, the methodology described in the implementation manual**
20 **was used. Ranges were first established for each of the four unplanned**
21 **outage rates associated with each unit. From an analysis of the**
22 **unplanned outage graphs, units with small historical variations in**

1 outage rates were assigned narrow ranges and units with large
2 variations were assigned wider ranges. These individual ranges,
3 expressed in terms of rates, were then converted into a single unit
4 availability range, expressed in terms of a factor, using the same
5 procedure described above for converting the availability targets from
6 rates to factors.

7
8 **Q. Have you determined the net operating heat rate targets and ranges for
9 the Company's GPIF units?**

10 **A. Yes, I have. This information is included in the Target and Range
11 Summary on Page 3 of my exhibit.**

12
13 **Q. How were these heat rate targets and ranges developed?**

14 **A. The development of the heat rate targets and ranges for the upcoming
15 period utilized historical data from the past three comparable GPIF
16 periods, as described in the Implementation Manual. A "least squares"
17 computer program was used to curve-fit the heat rate data within
18 ranges having a 90% confidence level of including all data. The
19 computer analyses and data plots used to develop the heat rate targets
20 and ranges for each of the GPIF units are contained in the section of
21 my exhibit entitled "Average Net Operating Heat Rate Curves".**

1 Q. How were the GPIF incentive points developed for the unit availability
2 and heat rate ranges?

3 A. GPIF incentive points for availability and heat rate were developed by
4 evenly spreading the positive and negative point values from the target
5 to the maximum and minimum values in case of availability, and from
6 the neutral band to the maximum and minimum values in the case of
7 heat rate. The fuel savings (loss) dollars were evenly spread over the
8 range in the same manner as described for the incentive points. The
9 maximum savings (loss) dollars are the same as those used in the
10 calculation of weighting factors.
11

12 Q. How were the GPIF weighting factors determined?

13 A. To determine the weighting factors for availability, a series of PROMOD
14 simulations were made in which each unit's maximum equivalent
15 availability was substituted for the target value to obtain a new system
16 fuel cost. The differences in fuel costs between these cases and the
17 target case determines the contribution of each unit's availability to fuel
18 savings. Except for Crystal River 3, the heat rate contribution of each
19 unit to fuel savings was determined by multiplying the BTU savings
20 between the minimum and target heat rates (at constant generation) by
21 the average cost per BTU for that unit. For Crystal River 3, the
22 contribution of heat rate to fuel savings was developed in a manner

1 similar to the fuel savings from availability, since an improvement in the
2 nuclear unit's efficiency results in a corresponding increase in the unit's
3 generating capacity. Weighting factors were then calculated by
4 dividing each individual unit's fuel savings by total system fuel savings.
5

6 **Q. What was the basis for determining the estimated maximum incentive**
7 **amount?**

8 **A. The determination of the maximum reward or penalty was based upon**
9 **monthly common equity projections obtained from a detailed financial**
10 **simulation performed by the Company's Corporate Model.**

11
12 **Q. Does this conclude your testimony?**

13 **A. Yes.**

FLORIDA POWER CORPORATION**DOCKET NO. 950001-EI****Re: GPIF Reward/Penalty Amount for
October 1994 through March 1995****DIRECT TESTIMONY OF
LARRY G. TURNER**

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

2 **A. My name is Larry G. Turner. My business address is P. O. Box 14042,**
3 **St. Petersburg, Florida 33733.**

4
5 **Q. By whom are you employed and in what capacity?**

6 **A. I am employed by Florida Power Corporation as Senior Performance**
7 **Engineer in Energy Supply Services, Plant Performance.**

8
9 **Q. Have the duties and responsibilities of your position with the Company**
10 **remained the same since you last testified in this proceeding?**

11 **A. Yes, they have.**

12
13 **Q. What is the purpose of your testimony?**

14 **A. The purpose of my testimony is to describe the calculation of the**
15 **Company's Generation Performance Incentive Factor (GPIF) amount for**
16 **the period of October 1994 through March 1995. This was developed**
17 **by comparing the actual performance of the Company's seven GPIF**

1 generating units to the approved targets set for these units prior to the
2 period.

3
4 **Q. Do you have an exhibit to your testimony in this proceeding?**

5 **A. Yes, under my direction an exhibit (LGT-1) has been prepared consisting**
6 **of the numbered sheets which are attached to my prepared testimony.**
7 **The exhibit contains the schedules required by the GPIF Implementation**
8 **Manual, which support the development of the incentive amount. I**
9 **have also included other data forms to supplement the required**
10 **schedules.**

11
12 **Q. What GPIF incentive amount have you calculated for this period?**

13 **A. I have calculated the Company's GPIF incentive amount to be a reward**
14 **of \$183,528. This amount was developed in a manner consistent with**
15 **the GPIF Implementation Manual. Sheet 1 of my exhibit shows the**
16 **calculation of system GPIF points and the corresponding reward. The**
17 **summary of weighted incentive points earned by each individual unit**
18 **can be found on Sheet 3.**

19
20 **Q. How were the incentive points for equivalent availability and heat rate**
21 **calculated for the individual GPIF units?**

22 **A. The calculation of incentive points is made by comparing the adjusted**
23 **actual performance data for equivalent availability and heat rate to the**
24 **target performance indicators for each unit. This comparison is shown**

1 on the Generating Performance Incentive Points Table found in my
2 exhibit Sheets 8 through 14.

3
4 **Q. Why is it necessary to make adjustments to the actual performance**
5 **data for comparison with the targets?**

6 **A. Adjustments to the actual equivalent availability and heat rate data are**
7 **necessary to allow their comparison with the "target" Point Tables**
8 **exactly as approved by the Commission prior to the period. These**
9 **adjustments are described in the Implementation Manual and are further**
10 **explained by a Staff memorandum, dated October 23, 1981, directed**
11 **to the GPIF utilities. The adjustments to actual equivalent availability**
12 **concern primarily the differences between target and actual planned**
13 **outage hours, and are shown on Sheet 6 of my exhibit. The heat rate**
14 **adjustments concern the differences between the target and actual Net**
15 **Output Factor (NOF), and are shown on Sheet 7. The methodology for**
16 **both the equivalent availability and heat rate adjustments are explained**
17 **in the Staff memorandum.**

18
19 **Q. Have you provided the as-worked planned outage schedules for the**
20 **Company's GPIF units to support your adjustments to actual equivalent**
21 **availability?**

22 **A. Yes, Sheet 23 of my exhibit shows a comparison of target and actual**
23 **planned outage hours in bar-chart form. Sheets 24 through 28 present**

1 as-worked critical path charts for each unit which experienced a
2 planned outage during the period.

3

4 Q. Does this conclude your testimony?

5 A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF R. SILVA

DOCKET NO. 950001-EI

MAY 15, 1995

1 Q. Please state your name and business address.

2 A. My name is Rene Silva and my business address is 9250 W. Flagler
3 Street, Miami, Florida 33174.

4

5 Q. Mr. Silva, would you please state your present position with Florida
6 Power and Light Company (FPL).

7 A. I am the Manager of Forecasting and Regulatory Response for the
8 Power Generation Business Unit of FPL.

9

10 Q. Mr. Silva, have you previously had testimony presented in this docket?

11 A. Yes, I have.

12

13 Q. Mr. Silva, what is the purpose of your testimony?

14 A. The purpose of my testimony is to present the actual performance
15 results for the Equivalent Availability Factor (EAF) and Average Net
16 Operating Heat Rate (ANOHR) for the nineteen (19) units used to
17 determine the Generating Performance Incentive Factor (GPIF) and to
18 compare these actual results to the targets that were approved in
19 Commission Order No. PSC-94-1092-FOF-EI issued September 6, 1994

1 for the period October, 1994 through March, 1995. On the basis of
2 this comparison, I have calculated an incentive amount for the period.

3
4 Q. Have you prepared, or caused to have prepared under your direction,
5 supervision or control, an exhibit in this proceeding?

6 A. Yes, I have. It consists of one document. Page 1 of that document is an
7 index to the contents of the document.

8
9 Q. What is the incentive amount you have calculated for the period
10 October, 1994 through March, 1995?

11 A. I have calculated a GPIF reward of \$3,109,109.

12
13 Q. Will you please explain how the reward amount is calculated?

14 A. The steps involved in making this calculation are contained in
15 Document No. 1. Page 2 of Document No. 1 is the GPIF
16 Reward/Penalty Table (Actual) and shows an overall GPIF
17 performance point value of +3.6765 which corresponds to a GPIF
18 reward of \$ 3,109,109. Page 3 is the calculation of the maximum
19 allowed incentive dollars. The calculation of the system actual GPIF
20 performance is shown on page 4. This page lists each unit, the
21 performance indicators (ANOHR and EAF), the weighing factors and
22 the associated GPIF points.

23
24 Pages 5 is the actual EAF and adjustments summary. This page lists
25 each of the nineteen (19) units, the actual outage factors and the actual

1 EAF in columns 1 through 5. Column 6 is the adjustment for planned
2 outage variation, which is shown on page 6. Column 7 is the adjusted
3 actual EAF and Column 8 is the target EAF. Column 9 contains the
4 Generating Performance Incentive Points for availability as
5 determined from the tables submitted to and approved by the
6 Commission prior to the start of the period. These tables are shown on
7 pages 8 through 26.

8
9 Page 7 shows the adjustments to ANOHR. For each of the nineteen
10 (19) units, it shows the target heat rate formula, the actual Net Output
11 Factor (NOF) and the actual ANOHR in columns 1 through 4. Since
12 heat rate varies with NOF, it is necessary to determine both the target
13 and actual heat rates at the same NOF. This adjustment is to provide a
14 common basis for comparison purposes and is shown numerically for
15 GPIF unit in columns 5 through 8. Column 9 contains the Generating
16 Performance Incentive Points that have been determined from the
17 table submitted for each unit and approved by the Commission. These
18 same tables are shown on pages 8 through 26.

19
20 Q. Mr. Silva, will you explain the primary reason or reasons why FPL will
21 be rewarded under the GPIF for the period October, 1994 through
22 March, 1995?

23 A. Yes. The primary reason that FPL will receive a reward for the period
24 was that Turkey Point nuclear unit 3 and St. Lucie nuclear unit 2 had
25 better availability than was projected. Additionally, the availability

1 performance at the St. John's 1 and 2 fossil units contributed to the
2 GPIF reward.

3 Q. Mr Silva, would you please summarize the performance of FPL's
4 nuclear unit availability ?

5

6 A. Turkey Point Unit 3 operated at an adjusted actual EAF of 97.3% as
7 compared to its target of 93.6%. This will result in a +10.00 point
8 reward which corresponds to a GPIF reward of \$1,018,188.

9

10 Turkey Point Unit 4 operated at an adjusted actual EAF of 60.3% as
11 compared to its target of 60.6%. This will result in a -1.00 point
12 penalty which corresponds to a GPIF penalty of (\$66,470).

13

14 St. Lucie Unit 1 operated at an adjusted actual EAF of 59.7% as
15 compared to its target of 60.6%. This will result in a -3.00 point
16 penalty which corresponds to a GPIF penalty of (\$247,105).

17

18 St. Lucie Unit 2 operated at an adjusted actual EAF of 97.2% as
19 compared to its target of 91.6%. This will result in a +10.00 point
20 reward which corresponds to a GPIF reward of \$1,081,613.

21

22 The total GPIF reward for the nuclear units' availability performance
23 is \$1,786,226.

24

1 Q. Mr. Silva, please summarize the nuclear units performance as it relates
2 to the ANOHR of the units.

3 A. Turkey Point nuclear unit 3 operated with an adjusted actual ANOHR
4 of 10882 BTU/KWH which was poorer than projected by 17
5 BTU/KWH. This ANOHR is within ± 75 BTU/KWH of the projected
6 target , therefore there is no GPIF reward or penalty.

7

8 Turkey Point nuclear unit 4 operated with an adjusted actual ANOHR
9 of 10862 BTU/KWH which was better than projected by 140
10 BTU/KWH. This will result in a +10.00 point reward which
11 corresponds to a GPIF reward of \$550,532.

12

13 St. Lucie nuclear unit 1 operated with an adjusted actual ANOHR of
14 10810 BTU/KWH which was better than projected by 44 BTU/KWH.
15 This ANOHR is within ± 75 BTU/KWH of the projected target ,
16 therefore there is no GPIF reward or penalty.

17

18 St. Lucie nuclear unit 2 operated with an adjusted actual ANOHR of
19 10869 BTU/KWH which was poorer than projected by 106 BTU/KWH.
20 This will result in a -1.61 point penalty which corresponds to a GPIF
21 penalty of (\$88,373).

22

23 The total reward for the nuclear units' heat rate performance is
24 \$462,159.

25

1 Q. Mr. Silva, what will the total GPIF incentive reward be for the FPL
2 nuclear units for EAF and ANOHR?

3 A. \$2,248,385.
4

5 Q. Mr. Silva, would you please summarize the performance of FPL's fossil
6 units?

7 A. The performance of the fifteen (15) fossil units included in the GPIF
8 for the period of October, 1994 through March, 1995 will receive a
9 total combined GPIF reward of \$860,724 for EAF and ANOHR.
10

11 Eleven (11) of the units performed better than their availability targets,
12 while the remaining four (4) performed poorer than their targets. The
13 combined fossil unit availability performance will result in a GPIF
14 reward of \$817,679.
15

16 Four (4) of the units operated with ANOHR's that were better than
17 projected and five (5) units operated with ANOHR's that were poorer
18 than projected. The remaining seven (7) units were within the + 75
19 BTU/KWH dead band and they will receive no incentive reward or
20 penalty. The combined fossil unit heat rate performance will result in a
21 GPIF reward of \$43,045.
22

23 Q. Mr. Silva, does this conclude your testimony?

24 A. Yes, it does.
25

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RENE SILVA

DOCKET NO. 950001-EI

June 20, 1995

1 Q Please state your name and address.

2 A. My name is Rene Silva. My business address is
3 9250 W. Flagler Street, Miami, Florida 33174.

4

5 Q. By whom are you employed and what is your
6 position?

7 A. I am employed by Florida Power & Light Company
8 (FPL) as Manager of Forecasting and Regulatory
9 Response in the Power Generation Business Unit.

10

11 Q. Have you previously testified in this docket?

12 A. Yes.

13

14 Q. What is the purpose of your testimony?

15 A. The purpose of my testimony is to present and
16 explain FPL's projections for (1) dispatch costs
17 of heavy fuel oil, light fuel oil, coal and
18 natural gas, (2) availability of natural gas to
19 FPL, (3) generating unit heat rates and

1 availabilities, and (4) quantities and costs of
2 interchange and other power transactions. These
3 projected values were used as input values to
4 POWRSYM in the calculation of the proposed fuel
5 cost recovery factor for the period October,
6 1995 through March, 1996. In addition, my
7 testimony addresses FPL's purchase of railcars
8 to be used to deliver Western coal to FPL's
9 Scherer Unit No.4, for the purpose of reducing
10 fuel costs.

11

12 **Q. Have you prepared or caused to be prepared under**
13 **your supervision, direction and control an**
14 **Exhibit in this proceeding?**

15 **A. Yes, I have. It consists of pages 1 through 7**
16 **of Appendix I of this filing.**

17

18 **Q. What are the key factors that could affect FPL's**
19 **price for heavy fuel oil during the October,**
20 **1995 through March, 1996 period?**

21 **A. The key factors are (1) demand for crude oil and**
22 **petroleum products (including heavy fuel oil),**
23 **(2) non-OPEC crude oil supply, (3) the extent to**
24 **which OPEC production matches actual demand for**
25 **OPEC crude oil, (4) the relationship between**

1 heavy fuel oil and crude oil, and the terms of
2 FPL's heavy fuel oil supply and transportation
3 contracts.

4
5 In general, world demand for crude oil and
6 petroleum products for the second half of 1995
7 and 1996 is projected to be moderately higher
8 than in 1994, as a result of the continued
9 economic recovery in Western Europe and Japan,
10 plus the rapid economic growth in other
11 countries in the Pacific Rim.

12
13 On the supply side, total non-OPEC crude oil
14 supply for the second half of 1995 and 1996 is
15 projected to be slightly higher than in 1994 due
16 to increases in production in the North Sea and
17 Colombia.

18
19 Regarding OPEC crude oil production, it is
20 projected that in the second half of 1995 and in
21 1996 OPEC production will effectively match
22 demand for OPEC crude oil.

23
24 It is projected that these factors will cause
25 crude oil prices, and consequently heavy fuel

1 oil prices, to continue to increase moderately
2 during the second half of 1995 and 1996,
3 relative to 1994 prices.

4

5 Q. What is the projected relationship between heavy
6 fuel oil and crude oil prices during the
7 October, 1995 through March, 1996 period?

8 A. Heavy fuel oil prices on the U. S. Gulf Coast
9 are projected to be approximately 75% of the
10 price of West Texas Intermediate (WTI) crude
11 oil.

12

13 Q. Please provide FPL's projection for the dispatch
14 cost of heavy fuel oil for the October, 1995
15 through March, 1996 period based on FPL's
16 evaluation of the key factors discussed above.

17 A. FPL's projection for the dispatch cost of heavy
18 fuel oil is provided on page 3 of Appendix I in
19 dollars per barrel at each of the oil-fired
20 plants. We project that during this period the
21 dispatch cost of heavy fuel oil will range from
22 \$14.66 to \$16.96 per barrel for 2.5% sulfur
23 grade fuel oil, \$14.71 to \$17.44 per barrel for
24 2.0% sulfur grade fuel oil, \$15.12 to \$17.28 per
25 barrel for 1.0% sulfur grade fuel oil, and from

1 \$15.94 to \$17.65 per barrel for 0.7% sulfur
2 grade fuel oil, approximately, (depending on the
3 month and the delivery location).

4

5 **Q. What are the key factors that could affect the**
6 **price of light fuel oil?**

7 **A. The key factors that affect the price of light**
8 **fuel oil are similar to those described above**
9 **for heavy fuel oil. Therefore, in general the**
10 **market price of light fuel oil is projected to**
11 **increase moderately during 1995 and 1996.**

12

13 **Q. Please provide FPL's projection for the dispatch**
14 **cost of light fuel oil for the period from**
15 **October, 1995 through March, 1996 based on FPL's**
16 **evaluation of the key factors discussed above.**

17 **A. FPL's projection for the dispatch cost of light**
18 **oil for each of the combustion turbine and**
19 **combined cycle plants is shown on page 4 of**
20 **Appendix I. We project that during this period**
21 **the dispatch cost of light fuel oil will range**
22 **from \$21.43 to \$25.37 per barrel, approximately,**
23 **depending on the month and delivery location.**

24

25 **Q. What is the basis for FPL's projections of the**

1 **dispatch cost of coal at the St. Johns River**
2 **Power Park (SJRPP)?**

3 A. The projected dispatch cost of coal at SJRPP is
4 based on FPL's price projection of spot coal
5 delivered to SJRPP.

6
7 About 73% of the coal purchased for SJRPP during
8 the period will be under the terms of the three
9 long-term coal supply contracts. Annual coal
10 volumes delivered under these contracts are
11 fixed on October 1st of the previous year.
12 Therefore, they do not affect the daily dispatch
13 decision. The dispatch price of coal for SJRPP
14 is based on the variable component of the coal
15 cost, the projected spot coal price. About 27%
16 of coal purchased for SJRPP for the period is
17 projected to be spot coal.

18
19 Q. **Please provide FPL's projection for the dispatch**
20 **cost of coal for SJRPP for the October, 1995**
21 **through March, 1996 period.**

22 A. FPL's projected dispatch cost of coal at SJRPP,
23 shown on page 5 of Appendix I, is approximately
24 \$1.54 per million BTU, delivered to SJRPP.

25

- 1 Q. What is the basis for FPL's projections of the
2 dispatch cost of coal at Scherer Unit 4 for the
3 October, 1995 through March, 1996 period?
- 4 A. FPL's projected dispatch cost of coal at Scherer
5 Unit 4 is the projected monthly delivered spot
6 price of coal. Approximately 80% of the coal
7 purchased during the period is projected to be
8 spot coal from the Powder River Basin. The
9 balance will be Eastern coal delivered under
10 existing long-term contracts.
- 11
- 12 Q. Please provide FPL's projection for the dispatch
13 cost of coal for Scherer Unit 4 during the
14 October, 1995 through March, 1996 period.
- 15 A. FPL's projected dispatch cost of coal at Scherer
16 Unit 4, shown on page 5 of Appendix I, is
17 approximately \$1.56 per million BTU delivered to
18 Plant Scherer.
- 19
- 20 Q. Does FPL's proposed fuel factor reflect a return
21 on, and depreciation of, railcars owned by FPL
22 that are used to deliver coal to Scherer Plant?
- 23 A. Yes. FPL owns 462 railcars, with an initial
24 value of \$24 million, that are used to deliver
25 coal to Scherer Plant. Like the railcars used to

1 deliver coal to SJRPP, which have been
2 previously approved for cost recovery purposes,
3 a return on, and depreciation of, these Scherer
4 railcars is reflected in FPL's fuel factor.

5

6 **Q. When did FPL purchase the railcars it uses to**
7 **deliver coal to Scherer Plant?**

8 A. FPL entered into a contract with Trinity
9 Industries, Inc., on April 26, 1994, to purchase
10 the 462 Scherer railcars. The railcars were
11 delivered and placed in service in four
12 installments between January 10 and March 23,
13 1995.

14

15 **Q. Why did FPL purchase railcars to deliver coal to**
16 **Scherer Plant?**

17 A. FPL purchased these railcars in order to reduce
18 fuel costs. In order for FPL to purchase and
19 transport the less expensive Western coal from
20 the Powder River Basin in Wyoming to Scherer
21 Plant, FPL had to supply the railcars. FPL
22 compared the projected cost of Western coal
23 delivered to Scherer Plant to that of Eastern
24 coal, and determined that purchasing and
25 transporting Western coal in FPL's railcars

1 would result in net savings of at least \$24
2 million and more likely about \$67 million over a
3 16-year period, present valued in 1992 dollars.
4 These projected savings are net of all costs,
5 including the cost of the railcars.

6

7 **Q. Why is the projected \$67 million savings more**
8 **likely than the \$24 million savings?**

9 **A.** The \$24 million savings was projected using a
10 "worst case" scenario. The magnitude of the
11 savings to be realized due to the change to
12 Western coal depends primarily on two factors:
13 the total Scherer Plant capital investment
14 required by the change to Western coal, and the
15 quantity of Western coal utilized in the entire
16 Scherer Plant (which produces the fuel savings).
17 FPL's "worst case" analysis scenario assumed
18 that the required capital investment would
19 include \$23 million for a stacker-reclaimer to
20 handle the coal, and that the Plant would
21 operate at a 30% capacity factor. Based on these
22 "worst case" assumptions, the net savings to
23 FPL's customers was projected to be about \$24
24 million. The savings calculation for this
25 scenario is summarized on page 8 of Appendix I

1 to my testimony.

2 The more probable scenario, which assumed that
3 the stacker-reclaimer would not be required, and
4 that the Plant (overall) would operate at a 65%
5 capacity factor, resulted in projected savings
6 of \$67 million. The savings calculation for this
7 scenario is summarized on page 9 of Appendix I
8 to my testimony.

9 Delivery of Western coal to Scherer Plant began
10 in October, 1993. Based on the experience
11 acquired during 20 months of handling both
12 Eastern and Western coal effectively without a
13 stacker-reclaimer, it is now the Plant co-
14 owners' opinion that the stacker-reclaimer will
15 not be required. In addition, the Plant
16 (overall) has been operating at a 67% capacity
17 factor. Therefore, since current and projected
18 operating conditions are consistent with the
19 second analysis scenario, it is much more likely
20 that the net savings will be about \$67 million.

21

22 **Q. What is the basis for the projected savings**
23 **associated with Western coal?**

24 **A. Western coal is significantly less expensive**
25 **than Eastern coal. At present, Eastern coal is**

1 priced at approximately \$1.12 per MMBTU, while
2 Western coal is priced at \$0.26 per MMBTU. This
3 \$0.86 price differential makes the conversion to
4 Western coal the economic choice. In addition,
5 this price difference is projected to increase
6 due to rising demand for Eastern "compliance"
7 (very low sulfur) coal among coal plants located
8 East of the Mississippi that have to reduce SO2
9 emissions to meet the requirements of Phase II
10 of the Clean Air Act. It is projected that the
11 average price difference over the next 15 years
12 will be well over \$1 per MMBTU.

13

14 **Q. Does the use of Western coal at Scherer Plant**
15 **provide any strategic benefits?**

16 **A. Yes.** The decision to use Western coal at Scherer
17 Plant has very significantly broadened the coal
18 resource base from which Scherer Plant can obtain
19 coal. The Plant can only use "compliance" coal
20 which emits less than 1.2 lbs. of SO2 per MMBTU
21 of energy input. Before having access to Western
22 coal sources, all the coal supplied to Scherer
23 Plant was produced in only those Central
24 Appalachia mines served by the Norfolk Southern
25 Railroad (NS), the only railroad with a line to

1 Scherer Plant. Since NS serves only one third of
2 the "compliance" coal production in Central
3 Appalachia, our ability to create price
4 competition among coal suppliers was very
5 limited. For example, if all the units at
6 Scherer Plant were to operate at 65% capacity
7 factor, the coal requirement would be 7.3
8 million tons of Eastern coal per year, or 35% of
9 current compliance coal production served by NS.
10 On the other hand, the Plant's Western coal
11 requirement, operating at the same capacity
12 factor, represents less than 6% of current
13 Powder River Basin (Western) coal production
14 capacity. This diversification of coal supply
15 made possible by having access to Western coal
16 will enable us to effectively create price
17 competition among coal producers and will result
18 in reduced coal costs from all sources in the
19 future.

20

21 **Q. Why does the purchase of Western coal make it**
22 **necessary for FPL to provide its own railcars?**

23 **A.** For two reasons. First, because the number of
24 available high-capacity aluminum railcars was
25 not sufficient to meet the Scherer Plant

1 requirement. Second, because, based on offers
2 received, the total cost of transporting coal in
3 existing railcars (including the cost of leasing
4 the railcars) would have been at least 6% higher
5 than the cost of transporting the coal in the
6 new railcars manufactured for FPL (including the
7 cost of the railcars themselves).

8 The total number of railcars offered to the
9 Scherer Plant co-owners was barely sufficient to
10 transport half the quantity required by the
11 Plant. In order to meet the Plant's requirement,
12 the Scherer Plant co-owners have had to purchase
13 a total of 13 newly manufactured unit trains,
14 while the number of railcars, a combination of
15 different designs and materials, offered for
16 lease was barely sufficient to complete 7 unit
17 trains. More importantly, the cost of the new
18 railcars (in dollars per ton) was lower than the
19 lowest offer for existing railcars. In addition,
20 the rates specified in FPL's coal transportation
21 contracts for Western coal resulted in
22 significantly lower costs for coal hauled in the
23 new high capacity, aluminum railcars purchased
24 by FPL.
25

1 Q. How did FPL determine the number of railcars
2 that would be necessary to deliver Western coal
3 for its Scherer Unit No.4?

4 A. Using FPL's system simulation model (POWRSYM) we
5 projected that Scherer Unit No.4 would operate
6 at an annual capacity factor of 85%, or higher,
7 every year beginning in 1996, and that it would
8 require at least 2.3 million tons of Western
9 coal per year.

10 One unit-train, composed of 110 railcars, can
11 deliver about 500,000 tons of Western coal per
12 year. Therefore 4.6 unit-trains would be
13 required to deliver the total projected Western
14 coal requirement for Scherer Unit No.4. FPL
15 decided to purchase four unit-trains, plus 22
16 spare railcars, for a total of 462 railcars.
17 These four unit trains are projected to be fully
18 utilized.

19 Since it is projected that a fifth unit-train
20 would not be fully utilized, and since there are
21 sufficient railcars available to meet FPL's
22 remaining need, we have decided that at present
23 the remaining required coal tonnage, if any,
24 will be delivered using railcars owned by other
25 Plant Scherer co-owners, or the railroad, or

1 other parties. As stated above, for fully
2 utilized unit-trains, it is more economic to
3 purchase the new railcars. However, for railcars
4 that are not to be fully utilized, and where the
5 rate of utilization is uncertain, it is
6 appropriate to lease railcars to meet
7 fluctuating coal requirement levels. The need to
8 purchase additional railcars will be re-
9 evaluated periodically, using more current
10 information about the operation of Scherer Unit
11 No.4.

12
13 **Q. How was Trinity Industries selected to provide**
14 **FPL's railcars?**

15 **A.** Trinity was selected as a result of a
16 competitive bid evaluation process conducted by
17 Southern Company Services acting as agent for
18 the Scherer Plant co-owners, which include FPL.
19 Trinity's total cost was the lowest of the three
20 bidders. FPL reviewed the bids and the
21 evaluation process, verified that Trinity's was
22 the lowest cost bid, and concurred with the
23 selection of Trinity Industries.

24
25 **Q. What are the factors that affect FPL's natural**

1 gas prices during the October, 1995 through
2 March, 1996 period?

3 A. The key factors are (1) domestic natural gas
4 demand and supply, (2) foreign natural gas
5 imports, (3) heavy fuel oil prices and (4) the
6 terms of FPL's gas supply and transportation
7 contracts.

8
9 In general, domestic demand for natural gas
10 during the second half of 1995 and 1996 is
11 projected to be moderately higher than in 1994
12 due primarily to increased usage for electric
13 generation. On the supply side, U.S. production
14 of natural gas, storage availability and
15 Canadian imports are also projected to increase
16 moderately. As indicated previously, heavy fuel
17 oil prices are projected to be somewhat higher.

18
19 It is projected that these factors will cause
20 FPL's natural gas prices to increase moderately
21 during 1995 and 1996.

22
23 Q. What are the factors that affect the
24 availability of natural gas to FPL during the
25 October, 1995 through March, 1996 period?

1 A. The key factors are (1) the existing capacity of
2 natural gas transportation facilities into
3 Florida and (2) the projected natural gas demand
4 in the State of Florida.

5
6 The current capacity of natural gas
7 transportation facilities into the State of
8 Florida is 1,455,000 million BTU per day. FPL's
9 total firm transportation capacity during the
10 October, 1995 through March, 1996 period will
11 range from 455,000 million BTU per day to
12 480,000 million BTU per day.

13
14 Total demand for natural gas in the State during
15 the period (including FPL's firm capacity) is
16 projected to be between 1,410,000 million BTU
17 per day and 1,305,000 million BTU per day, or
18 from 45,000 to 150,000 million BTU per day below
19 the pipeline's total capacity. This projected
20 available pipeline capacity could enable FPL to
21 acquire additional natural gas.

22
23 **Q. Please provide FPL's projections for natural gas**
24 **unit costs and availability to FPL for the**
25 **October, 1995 through March, 1996 period based**

1 **on FPL's evaluation of these factors.**

2 A. FPL's projections of delivered natural gas unit
3 costs and availability are provided on page 6 of
4 Appendix I. We project that during this period
5 the system-weighted-average total cost of
6 natural gas delivered to the FPL system will
7 range from \$2.22 to \$2.66 per million BTU and
8 the average total availability of natural gas to
9 FPL will range from 500,000 to 630,000 million
10 BTU per day.

11
12 **Q. Please describe how you have developed the**
13 **projected unit Average Net Operating Heat Rates**
14 **shown on Schedule E4 of Appendix II.**

15 A. The projected Average Net Operating Heat Rates
16 were developed using the actual monthly Average
17 Net Operating Heat Rates and the corresponding
18 Net Output Factors from previous October through
19 March periods. This historical data was used to
20 calculate an efficiency factor, or heat rate
21 multiplier, for each generating unit. The most
22 recent unit dispatch heat rate curves, modified
23 by the unit's efficiency factors, were provided
24 as input to the POWRSYM model.

25

- 1 Q. Are you providing the outage factors projected
2 for the period October, 1995 through March,
3 1996?
- 4 A. Yes. This data is shown on page 7 of Appendix I.
5
- 6 Q. How were the outage factors for this period
7 developed?
- 8 A. The unplanned outage factors were developed
9 using the actual historical full and partial
10 outage event data for each of the units. The
11 actual unplanned outage factor of each
12 generating unit for the previous twelve-month
13 period was adjusted, as necessary, to eliminate
14 non-recurring events and recognize the effect of
15 planned outages to arrive at the projected
16 factor for the October, 1995 through March, 1996
17 period.
18
- 19 Q. Please describe significant planned outages for
20 the October, 1995 through March, 1996 period.
- 21 A. Planned outages at our nuclear units are the
22 most significant in relation to Fuel Cost
23 Recovery. Turkey Point Unit No.3 is scheduled
24 to be out of service for refueling from
25 September 4 until October 27, 1995 or twenty six

1 days during the period. St. Lucie Unit No.2 is
2 scheduled to be out of service for refueling
3 from October 2 until November 24, 1995 or fifty
4 three days during the period. Turkey Point Unit
5 No.4 is scheduled to be out of service for
6 refueling from March 1 until April 24, 1996 or
7 thirty one days during the period. There are no
8 other significant planned outages during the
9 projected period.

10

11 Q. Are any changes to FPL's generation capacity
12 planned during the October, 1995 through March,
13 1996 period?

14 A. No.

15

16 Q. Please discuss the arrangements between FPL and
17 JEA regarding the St. Johns River Power Park
18 (SJRPP).

19 A. Under the terms of the contract, FPL owns 20% of
20 the units and has the right to schedule an
21 additional 30% of the capacity of the units from
22 JEA's portion. The portion of energy scheduled
23 by FPL related to FPL's 20% ownership of the
24 units is included in Fuel Cost Recovery
25 Schedules as FPL generation, and the balance of

1 energy scheduled and related energy costs are
2 included in Fuel Cost Recovery Schedules as
3 purchased power.

4

5 Q. Are you providing the projected interchange and
6 purchased power transactions forecasted for
7 October, 1995 through March, 1996?

8 A. Yes. This data is shown on Schedules E6, E7,
9 E8, and E9 of Appendix II of this filing.

10

11 Q. In what types of interchange transactions does
12 FPL engage?

13 A. FPL purchases interchange power from others
14 under several types of interchange transactions
15 which have been previously described in this
16 docket: Emergency - Schedule A; Short Term Firm
17 - Schedule B; Economy - Schedule C; Extended
18 Economy - Schedule X; Opportunity Sales -
19 Schedule OS; UPS Replacement Energy - Schedule R
20 and Economic Energy Participation - Schedule EP.

21

22 For services provided by FPL to other utilities,
23 FPL has developed amended Interchange Service
24 Schedules, including AF (Emergency), BF
25 (Scheduled Maintenance), CF (Economy), DF

1 (Outage), and XF (Extended Economy). These
2 amended schedules replace and supersede existing
3 Interchange Service Schedules A, B, C, D, and X
4 for services provided by FPL.

5

6 **Q. Does FPL have arrangements other than**
7 **interchange agreements for the purchase of**
8 **electric power and energy which are included in**
9 **your projections?**

10 **A. Yes. FPL purchases coal-by-wire electrical**
11 **energy under the 1988 Unit Power Sales Agreement**
12 **(UPS) with the Southern Companies. FPL has**
13 **contracts to purchase nuclear energy under the**
14 **St. Lucie Plant Nuclear Reliability Exchange**
15 **Agreements with Orlando Utilities Commission**
16 **(OUC) and Florida Municipal Power Agency (FMPA).**
17 **FPL also purchases energy from JEA's portion of**
18 **the SJRPP Units, as stated above. Additionally,**
19 **FPL purchases energy and capacity from**
20 **Qualifying Facilities under existing tariffs and**
21 **contracts.**

22

23 **Q. Please provide the projected energy costs to be**
24 **recovered through the Fuel Cost Recovery Clause**
25 **for the power purchases referred to above during**

1 the October, 1995 through March, 1996 period.
2 A. Under the UPS agreement FPL's capacity
3 entitlement during the projected period is 916
4 MW from October, 1995 through March, 1996. Based
5 upon the alternate and supplemental energy
6 provisions of UPS, an availability factor of
7 100% is applied to these capacity entitlements
8 to project energy purchases. The projected UPS
9 energy (unit) cost for this period, used as
10 input to POWRSYM, is based on data provided by
11 the Southern Companies. For the period, FPL
12 projects the purchase of 1,596,506 MWH of UPS
13 Energy at a cost of \$29,588,655. In addition,
14 we project the purchase of 1,367,382 MWH of UPS
15 Replacement energy (Schedule R) at a cost of
16 \$23,372,045. The total UPS Energy plus Schedule
17 R projections are presented on Schedule E7 of
18 Appendix II.

19
20 Energy purchases from the JEA-owned portion of
21 the St. Johns River Power Park generation are
22 projected to be 1,393,462 MWH for the period at
23 an energy cost of \$20,986,800. FPL's cost for
24 energy purchases under the St. Lucie Plant
25 Reliability Exchange Agreements is a function of

1 the operation of St. Lucie Unit 2 and the fuel
2 costs to the owners. For the period, we project
3 purchases of 179,233 MWH at a cost of \$788,275.
4 These projections are shown on Schedule E7 of
5 Appendix II.

6
7 In addition, as shown on Schedule E8 of Appendix
8 II, we project that purchases from Qualifying
9 Facilities for the period will provide 2,620,366
10 MWH at a cost to FPL of \$45,648,559.

11
12 **Q. How were energy costs related to purchases from**
13 **Qualifying Facilities developed?**

14 **A.** For those contracts that entitle FPL to purchase
15 "as-available" energy we used FPL's fuel price
16 forecasts as inputs to the POWRSYM model to
17 project FPL's avoided energy cost that is used
18 to set the price of these energy purchases each
19 month. For those contracts that enable FPL to
20 purchase firm capacity and energy, the
21 applicable Unit Energy Cost mechanism prescribed
22 in the contract is used to project monthly
23 energy costs.

24
25 **Q. Have you projected Schedule A/AF - Emergency**

1 **Interchange Transactions?**

2 A. No purchases or sales under Schedule A/AF have
3 been projected since it is not practical to
4 estimate emergency transactions.

5

6 **Q. Have you projected Schedule B/BF - Short-Term
7 Firm Interchange Transactions?**

8 A. No commitment for such transactions had been
9 made when projections were developed.
10 Therefore, we have estimated that no Schedule BF
11 sales or Schedule B purchases would be made in
12 the projected period.

13

14 **Q. Please describe the method used to forecast the
15 Economy Transactions.**

16 A. The quantity of economy sales and purchase
17 transactions are projected based upon historic
18 transaction levels, corrected to remove non-
19 recurring factors.

20

21 **Q. What are the forecasted amounts and costs of
22 Economy energy sales?**

23 A. We have projected 208,550 MWH of Economy energy
24 sales for the period. The projected fuel cost
25 related to these sales is \$4,628,776. The

1 projected transaction revenue from the sales is
2 \$6,372,101. Eighty percent of the gain for
3 Schedule C is \$1,394,650 and is credited to our
4 customers.

5

6 **Q. In what document are the fuel costs of economy**
7 **energy sales transactions reported?**

8 A. Schedule E6 of Appendix II provides the total
9 MWH of energy and total dollars for fuel
10 adjustment. The 80% of gain is also provided on
11 Schedule E6 of Appendix II.

12

13 **Q. What are the forecasted amounts and costs of**
14 **Economy energy purchases?**

15 A. The costs of these purchases are shown on
16 Schedule E9 of Appendix II. For the October,
17 1995 through March, 1996 period FPL projects it
18 will purchase a total of 2,155,149 MWH at a cost
19 of \$38,821,030. If generated, we estimate that
20 this energy would cost \$43,646,079. Therefore,
21 these purchases are projected to result in
22 savings of \$4,825,049.

23

24 **Q. What are the forecasted amounts and cost of**
25 **energy being sold under the St. Lucie Plant**

1 **Reliability Exchange Agreement?**

2 A. We project the sale of 258,199 MWH of energy at
3 a cost of \$1,166,444. These projections are
4 shown on Schedule E6 of Appendix II.

5

6 **Q. Would you please summarize your testimony?**

7 A. Yes. In my testimony I have presented FPL's
8 fuel price projections for the fuel cost
9 recovery period of October, 1995 through March,
10 1996. In addition, I have presented FPL's
11 projections for generating unit heat rates and
12 availabilities, and the quantities and costs of
13 interchange and other power transactions for the
14 same period. These projections were based on
15 the best information available to FPL, and were
16 used as inputs to POWRSYM in developing the
17 projected Fuel Cost Recovery Factor for the
18 October, 1995 through March, 1996 period.

19 My testimony also explains FPL's decision to use
20 Western coal at its Scherer Unit No.4 and
21 purchase 462 railcars to deliver the Western
22 coal, and thereby achieve significant savings.

23

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

25 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF R. SILVA

DOCKET NO. 950001-EI

JUNE 20, 1995

1 Q. Please state your name and business address.

2 A. My name is Rene Silva and my business address is 9250 W. Flagler
3 Street, Miami, Florida 33174.

4

5 Q. Mr. Silva, would you please state your present position with Florida
6 Power and Light Company (FPL).

7 A. I am the Manager of Forecasting and Regulatory Response for the
8 Power Generation Business Unit of FPL.

9

10 Q. Mr. Silva, have you previously had testimony presented in this docket?

11 A. Yes, I have.

12

13 Q. Mr. Silva, what is the purpose of your testimony?

14 A. The purpose of my testimony is to present the target unit average net
15 operating heat rates and target unit equivalent availabilities for the
16 period October, 1995 through March, 1996, for use in determining the
17 Generating Performance Incentive Factor (GPIF). The improvement
18 and degradation range for each performance indicator is also presented
19 in this testimony.

1
2
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Q. Mr. Silva could you please summarize what the FPL system targets are for Equivalent Availability Factor (EAF) and Average Net Operating Heat Rate (ANOHR).

A. FPL projects a weighted system equivalent planned outage factor of 13.9% and a weighted system equivalent unplanned outage factor of 7.5% which yield a weighted system equivalent availability of 78.6%. This target includes the refueling of all four nuclear units during the October, 1995 through March, 1996 period. FPL also projects a weighted system average net operating heat rate of 9729 BTU/KWH. As discussed in later in this testimony, these targets represent fair and reasonable values when compared to historical data . I therefore ask that the targets for these performance indicators and the respective improvement/degradation ranges in my testimony be approved by the Commission for FPL.

Q. Have you prepared, or caused to have prepared under your direction, supervision or control, an exhibit in this proceeding?

A. Yes, I have. It consists of one document. The first page of this document is an index to the contents of the document. All other pages are numbered according to the latest revisions of the GPIF Manual as approved by the Commission.

Q. Have you established target levels of performance for the units to be considered in establishing the GPIF for FPL?

1 A. Yes, I have. Document No. 1, pages 6 and 7 contain the information
2 summarizing the targets and ranges for unit equivalent availability and
3 average net operating heat rates for the seventeen (17) generating units
4 which FPL proposes to have considered. These sheets were prepared in
5 accordance with the latest revisions of the GPIF Manual, except that, for
6 consistency with previous GPIF filings, it is necessary to divide the
7 format of Sheet 3.505 of the GPIF Manual into two sheets. All of these
8 targets have been derived utilizing methodologies as adopted in Section 4,
9 Subsection 2.3 of the GPIF Manual.

10
11 Q. Please summarize FPL's methodology for determining equivalent
12 availability targets?

13 A. The GPIF Manual requires that the equivalent availability target for
14 each unit be determined as the difference between 100% and the sum of
15 the Planned Outage Factor (POF) and the Unplanned Outage Factor
16 (UOF). The POF for each unit is determined by the length of the planned
17 outage during the projected period. The GPIF Manual also requires that
18 the sum of the most recent twelve month ending average forced outage
19 factor (FOF) and maintenance outage factor (MOF) be used as the
20 starting value for the determination of the target unplanned outage factor
21 (UOF). The UOF is then adjusted to reflect recent monthly performance
22 and known modifications or changes in equipment.

23
24 For most units in the GPIF this adjustment is usually done for units
25 which had or are forecast to have planned outages. When a unit is in a

1 planned outage state the unit cannot incur an unplanned outage. For this
2 reason, when historical data, which contains a planned outage, is used for
3 developing targets, the UOF will be lower than if the unit had operated
4 the entire period. To account for this, the historical UOF is increased in
5 proportion to the planned outage duration for that period. Similarly, if a
6 unit is forecast to have a planned outage in the projection period the
7 adjusted historical UOF will be higher than it should because it will not
8 be exposed to unplanned outages for the entire period. In this case the
9 UOF is reduced in proportion to the forecast planned outage duration.

10
11 Q. Mr. Silva, were the EAF targets for the GPIF units determined using the
12 methodology as described in the GPIF Operating Manual?

13 A. Yes.

14
15 Q. How did you select the units to be considered when establishing the GPIF
16 for FPL?

17 A. The seventeen (17) units which FPL proposes to use represent the top
18 80.64% of the forecast system net generation for the October, 1995
19 through March, 1996 period. These units were selected in accordance
20 with the GPIF Manual Section 3.1 using the estimated net generation for
21 each unit taken from the production costing simulation program,
22 POWRSYM, which forms the basis for the projected levelized fuel cost
23 recovery factor for the period.

24

- 1 Q. Mr. Silva, from the heat rate targets and equivalent availability range
2 projections, do FPL's generation performance targets represent a
3 reasonable level of efficiency?
- 4 A. Yes. To fully appreciate why these targets are reasonable, and in some
5 cases ambitious, it would be necessary to discuss the development of both
6 the heat rate and availability targets for each of the seventeen units in the
7 GPIF. However, a less rigorous approach of comparing weighted system
8 values of these targets to actual values for prior periods will provide a
9 valuable insight into the appropriateness of the targets.
- 10 Q. Does this conclude your testimony?
- 11 A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF C. VILLARD

DOCKET NO. 950001-EI

June 20, 1995

1 Q. Please state your name and address.

2 A. My name is Claude Villard. My business address is
3 700 Universe Boulevard, Juno Beach, Florida 33408.

4

5 Q. By whom are you employed and what is your position?

6 A. I am employed by Florida Power & Light Company
7 (FPL) as Supervisor of Nuclear Fuel Procurement.

8

9 Q. Have you previously testified in this docket?

10 A. Yes, I have.

11

12 Q. What is the purpose of your testimony?

13 A. The purpose of my testimony is to present and
14 explain FPL's projections of nuclear fuel costs for
15 the thermal energy (MMBTU) to be produced by our
16 nuclear units and costs of disposal of spent
17 nuclear fuel. Both of these costs were input
18 values to POWRSYM for the calculation of the
19 proposed fuel cost recovery factor for the period

1 October 1995 through March 1996.

2

3 **Q. What is the basis for FPL's projections of nuclear**
4 **fuel costs?**

5 **A. FPL's nuclear fuel cost projections are developed**
6 **using energy production at our nuclear units and**
7 **their operating schedules, consistent with those**
8 **assumed in POWRSYM, for the period October 1995**
9 **through March 1996.**

10

11 **Q. Please provide FPL's projection for nuclear fuel**
12 **unit costs and energy for the period October 1995**
13 **through March 1996.**

14 **A. We estimate the nuclear units will produce**
15 **110,965,066 MBTU of energy at a cost of \$0.408 per**
16 **MMBTU, excluding spent fuel disposal costs for the**
17 **period October 1995 through March 1996.**
18 **Projections by nuclear unit and by month are**
19 **provided on Schedule E-4 of Appendix II.**

20

21 **Q. Please provide FPL's projections for nuclear spent**
22 **fuel disposal costs for the period October 1995**
23 **through March 1996 and what is the basis for FPL's**
24 **projections.**

25 **A. FPL's projections for nuclear spent fuel disposal**

1 costs are provided on Schedule E-2 of Appendix II.
2 These projections are based on FPL's contract with
3 the Department of Energy (DOE), which sets the
4 spent fuel disposal fee at 1 mill per net Kwh
5 generated minus transmission and distribution line
6 losses.

7
8 **Q. Please provide FPL's projection for Decontamination**
9 **and Decommissioning (D&D) costs to be paid in the**
10 **period October 1995 through March 1996 and what is**
11 **the basis for FPL's projection.**

12 **A.** As indicated in prior testimony, The National
13 Energy Policy Act of 1992 (The Act) requires FPL to
14 make certain payments to a fund established at the
15 U.S. Treasury, to cover the cost of decontamination
16 and decommissioning DOE's enrichment facilities.
17 D&D payments are in direct proportion to the amount
18 of enrichment services purchased by FPL, divided by
19 the amount produced by the DOE, through October
20 1992, multiplied by the total annual assessment of
21 \$480M, as specified in the Energy Policy Act of
22 1992, and escalated for inflation using the CPI-U
23 (consumer price index - for urban customers).
24 FPL's projection of \$5.1M for D&D costs to be paid
25 during the period October 1995 through March 1996

1 is included on Schedule E-2 of Appendix II.

2

3 **Q. Are there any other fuel-related costs which FPL is**
4 **including in the calculation of the proposed Fuel**
5 **Cost Recovery Factor?**

6 **A. No.** However, FPL is requesting pre-approval to
7 recover through the Fuel Cost Recovery Clause, the
8 implementation costs associated with changing from
9 an 18 month to a 24 month fuel cycle operation for
10 FPL's St. Lucie Nuclear Units 1 and 2. These
11 implementation costs, which consist of costs for
12 outside services and contractors hired for this
13 specific project, costs for materials and
14 construction needed for implementation, and Nuclear
15 Regulatory Commission (NRC) fees, are projected to
16 total \$2.7M over the next four years. If approved,
17 FPL will request recovery of these costs when the
18 24 month fuel cycle is implemented. Details of the
19 accounting treatment and the basis for requesting
20 the recovery of these costs through the Fuel Cost
21 Recovery Clause are contained in the testimony of
22 FPL witness B. T. Birkett.

23

24 **Q. What benefits will FPL's customers receive by the**
25 **St. Lucie nuclear units operating on a 24 month**

1 **fuel cycle?**

2 A. Operating the St. Lucie nuclear units on a 24 month
3 fuel cycle will eliminate one refueling outage
4 every six years per unit or one refueling outage
5 every three years for the St. Lucie Plant. The
6 elimination of outages will increase the expected
7 generation of the units. According to a recent
8 feasibility study of 24 month fuel cycle operation
9 for the St. Lucie Plant, the additional nuclear
10 generation gained by the 24 month fuel cycle
11 produces a fuel savings of approximately \$171M
12 through the year 2016, net of the implementation
13 costs and the expected increase in nuclear fuel
14 costs. These savings result from the fuel cost
15 differential between lower cost nuclear fuel and
16 higher cost fossil fuel. The estimated fuel savings
17 were calculated by using the production costing
18 model, POWRSYM. We are assuming as input into the
19 POWRSYM model, that the first 24 month cycle of
20 operation would begin in late Spring of 1997, for
21 St. Lucie Unit 2, and in late Spring 1998, for St.
22 Lucie Unit 1.

23
24 We are currently completing a similar feasibility
25 and economic study for the Turkey Point Plant. We

1 expect that, if the results are cost effective, FPL
2 will implement the same 24 month fuel cycle
3 operation at the Turkey Point Plant.
4

5 Q. What activities and costs are involved in
6 implementing 24 month fuel cycle operation for the
7 nuclear units at St. Lucie?

8 A. The 24 month fuel cycle operation will require FPL
9 to formally amend the operating license for St.
10 Lucie with the Nuclear Regulatory Commission. To
11 receive a license amendment, FPL will evaluate and
12 perform analyses on all affected plant systems,
13 structures, and components to demonstrate and
14 ensure that there are no adverse impacts on plant
15 safety, equipment reliability, and operations
16 resulting from an extended cycle length.
17

18 These activities include a) analyses to justify
19 changing the Plant Technical Specifications
20 intervals for surveillance and inspection from 18
21 month to 24 month, b) analyses to revise allowances
22 for instrument drift between calibration every 24
23 months and to update impacted safety analyses, c)
24 an evaluation of equipment history to verify that
25 no degradation of equipment reliability will occur

1 when plant maintenance intervals are extended to
2 accommodate 24 month fuel cycle operation, and d)
3 revision of all of our design bases documents to
4 incorporate our evaluation of the impact of 24
5 month fuel cycle operation.

6
7 Additionally, our material and construction cost
8 estimates assume that some plant design
9 modifications will be required, such as the
10 replacement of instrumentation due to expected
11 increased drift between calibration. Finally, FPL
12 will pay certain fees to the NRC to cover
13 application costs and their review.

14
15 As mentioned earlier, the implementation costs
16 related to the 24 month fuel cycle operation of
17 FPL's St. Lucie Units 1 and 2 are estimated at
18 \$2.7M. We estimate these costs will occur over a
19 four year period, beginning in 1995, with
20 approximately 60% of the costs for outside services
21 and contractors hired for this specific project,
22 30% for materials and construction costs, and 10%
23 for fees payable to the NRC.

24
25 **Q. Are there currently any unresolved disputes under**

1 **FPL's nuclear fuel contracts?**

2 A. Yes. As reported in prior testimonies, there are
3 two unresolved disputes.

4
5 The first dispute is under FPL's contract with the
6 Department of Energy (DOE) for final disposal of
7 spent nuclear fuel. FPL, along with a number of
8 electric utilities, has filed suit against the DOE
9 over DOE's denial of its obligation to accept spent
10 nuclear fuel beginning in 1998. The suit requests
11 that the court affirm DOE's legal obligation to
12 begin accepting spent nuclear fuel in 1998.
13 Further, the court is requested to direct the DOE
14 to develop a program of acceptance of spent nuclear
15 fuel on a timely basis and make regular periodic
16 reports on its progress. In addition, the suit
17 requests that, if appropriate, all or a portion of
18 the utilities' Nuclear Waste Fund Fees be paid into
19 an escrow account.

20
21 In late April 1995, the Department of Energy (DOE)
22 issued an opinion that concludes it has no legal
23 obligation to begin accepting spent fuel for
24 disposal in 1998 or to provide interim storage
25 under the Nuclear Waste Policy Act. The DOE was

1 required by the U.S. Court of Appeals for the
2 District of Columbia to submit, by April 28, 1995,
3 its final conclusion on a Notice of Inquiry it had
4 issued since May 1994.

5
6 The DOE has indicated its willingness to discuss
7 financial or other assistance that may be
8 appropriate in light of its inability to provide
9 disposal services beginning in 1998, but has
10 provided no specifics on its intent.

11
12 Secondly, FPL is currently seeking to resolve a
13 price dispute for uranium enrichment services
14 purchased from the United States (U.S.) Government,
15 after October 1, 1992. For deliveries from October
16 1, 1992 to July 1, 1993, enrichment services were
17 provided by the DOE. Subsequent to July 1, 1993,
18 DOE's responsibilities were transferred to a new
19 entity, the United States Enrichment Corporation
20 (USEC) as discussed below. Because of this
21 transfer of responsibilities, our dispute with the
22 U.S. Government has to be resolved with two
23 separate entities.

24
25 Our contract for enrichment services with the U.S.

1 Government calls for pricing to be calculated in
2 accordance with "Established DOE Pricing Policy".
3 Such policy had always been one of cost recovery,
4 which included costs related to the Decontamination
5 and Decommissioning (D&D) of the DOE's enrichment
6 facilities. However, the Energy Policy Act of 1992
7 (The Act) requires utilities to make separate
8 payments to the U.S. Treasury for D&D, starting in
9 Fiscal 1993, as FPL has been doing. Therefore, D&D
10 should not have been included in the price charged
11 by DOE since then, and the price should have been
12 reduced accordingly. FPL has written to DOE to
13 request such refund. DOE's first response has been
14 to acknowledge our letter and to request clarifying
15 information on the amount of our claim. However,
16 on May 9, 1995, The Justice Department responded on
17 behalf of DOE, deemed this issue to be in dispute
18 and requested that all correspondence be addressed
19 to them. FPL's next step will be to file a claim
20 with the Contracting Officer, which we intend to
21 pursue in the coming months.

22
23 In addition, The Act created a new U.S. Government
24 corporation, the United States Enrichment
25 Corporation (USEC). Effective July 1, 1993, The

1 Act transferred from the DOE to the USEC all U.S.
2 Government contracts, for the production and sales
3 of enrichment services. Because of the transfer
4 to the USEC, the cost of producing enrichment
5 services has decreased significantly. For example,
6 the USEC no longer needs to account for the costs
7 of D&D, because the Act requires that utilities
8 make separate payments for D&D. However, the USEC
9 has continued to charge the same price charged by
10 DOE prior to the transfer.

11
12 In prior testimony, FPL had stated that it filed
13 three claims challenging the price charged by the
14 USEC for delivery of enrichment services since July
15 1, 1993. Since filing our claims, FPL has
16 negotiated a new contract with the USEC in which
17 the USEC has agreed to reduce its price for current
18 contractual commitments. This contract settled our
19 claims against the USEC for deliveries from July 1,
20 1993. We are still requesting a refund from the
21 DOE for enrichment services they provided prior to
22 the transfer of responsibilities to the USEC.

- 23
24 Q. Does this conclude your testimony?
25 A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**FLORIDA POWER & LIGHT COMPANY****TESTIMONY OF B.T. BIRKETT****DOCKET NO. 950001-EI****May 19, 1995**

1 Q. Please state your name, business address, employer and position.

2 A. My name is Barry T. Birkett, and my business address is 9250
3 West Flagler Street, Miami, Florida, 33174. I am employed by
4 Florida Power & Light Company (FPL) as Manager of Rates and
5 Tariff Administration.

6

7 Q. Have you previously testified in this docket?

8 A. Yes, I have.

9

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

11 A. The purpose of my testimony is to present the schedules necessary
12 to support the actual Fuel Cost Recovery Clause (FCR), Capacity
13 Cost Recovery Clause (CCR), and Oil Backout Cost Recovery
14 Clause (OB) Net True-Up amounts for the period October 1994
15 through March 1995. The Net True-Up for FCR is an overrecovery.

1 including interest, of \$12,465,206. The Net True-Up for CCR is an
2 overrecovery, including interest, of \$4,856,873. The Net True-Up for
3 OB is an underrecovery, including interest, of \$6,647. I am
4 requesting Commission approval to include these true-up amounts
5 in the calculation of the FCR, CCR, and OB factors respectively, for
6 the period October 1995 through March 1996.

7

8 **Q. Have you prepared or caused to be prepared under your direction,
9 supervision or control an exhibit in this proceeding?**

10 **A. Yes, I have. It consists of four appendices. Appendix I contains the
11 FCR related schedules, Appendix II contains the CCR related
12 schedules, and Appendix III contains the OB related schedules.
13 Also attached to this filing is Appendix IV, which contains
14 Commission Schedules A-1 through A-13 for October 1994 through
15 March 1995 period.**

16

17 **Q. What is the source of the data which you will present by way of
18 testimony or exhibits in this proceeding?**

19 **A. Unless otherwise indicated, the actual data is taken from the books
20 and records of FPL. The books and records are kept in the regular
21 course of our business in accordance with generally accepted
22 accounting principles and practices, and provisions of the Uniform
23 System of Accounts as prescribed by this Commission.**

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FUEL COST RECOVERY CLAUSE (FCR)

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Q. Please explain the calculation of the Net True-up Amount.

A. Appendix I, page 3, entitled "Summary of Net True-Up Amount", shows the calculation of the Net True-Up for the period, an overrecovery of \$12,465,206, which I am requesting be included in the calculation of the Fuel Cost Recovery Factor for the period October 1995 through March 1996. The calculation of the true-up amount for the period follows the procedures established by this Commission as set forth on Commission Schedule A-2 "Calculation of True-Up and Interest Provision".

The actual End-of-Period overrecovery of \$27,079,758 shown on line 1 less the estimated/actual End-of-Period overrecovery of \$14,614,552 shown on line 2 that was included in the calculation of the Fuel Cost Recovery Factor for the period April 1995 through September 1995, results in the Net True-Up for the period shown on line 3, an overrecovery of \$12,465,206.

Q. Have you provided a schedule showing the variances between actuals and estimated/actuals?

A. Yes. Appendix I, page 4, entitled "Calculation of Final True-up Amount", shows the actual fuel costs and revenues compared to the estimated/actuals for the period October 1994 through March 1995.

- 1 Q. What was the variance in fuel costs?
- 2 A. As shown on Appendix I, page 4, line A7, actual fuel costs on a
3 Total Company basis were \$8.2 million lower than the
4 estimated/actual projection. This variance is detailed by major cost
5 components on Appendix I, page 5, entitled "Final True-up Variance
6 Analysis". The \$8.2 million total system variance was primarily
7 caused by a \$21.3 million decrease in the Fuel Cost of System Net
8 Generation, a \$4.0 million decrease in the Fuel Cost of Purchased
9 Power, offset by a \$15.7 million increase in Energy Cost of
10 Economy Purchases.
- 11
- 12 Q. What was the variance in retail (jurisdictional) Fuel Cost Recovery
13 revenues?
- 14 A. As shown on line D1, actual jurisdictional Fuel Cost Recovery
15 revenues, net of revenue taxes, were \$3.6 million higher than the
16 estimated/actual projection. This increase was due to higher
17 jurisdictional kWh sales. Jurisdictional sales were 238,029,837 kWh
18 (.69%) higher than the estimated/actual projection.
- 19
- 20 Q. Have you provided a schedule explaining the reasons for these
21 variances?
- 22 A. Yes Pages 5 and 6, of Appendix I, contain a more detailed
23 analysis of the cost variances with a corresponding explanation for
24 each significant variance.

CAPACITY COST RECOVERY CLAUSE (CCR)

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Q. Please explain the calculation of the Net True-up Amount.

A. Appendix II, page 3, entitled "Summary of Net True-Up Amount" shows the calculation of the Net True-Up for the period, an overrecovery of \$4,856,873, which I am requesting be included in the calculation of the Capacity Cost Recovery Factor for the period October 1995 through March 1996.

The actual End-of-Period overrecovery of \$19,979,456, shown on line 1 less the estimated/actual End-of-Period overrecovery of \$15,122,583, shown on line 2 that was included in the Capacity Cost Recovery Factor for the period April 1995 through September 1995, results in the Net True-Up shown on line 3, an overrecovery of \$4,856,873.

Q. Have you provided a schedule showing the calculation of the End-of-Period true-up?

A. Yes. Appendix II, page 4, entitled "Calculation of Final True-up Amount", shows the calculation of the CCR End-of period true-up for the period October 1994 through March 1995. The End of-Period true-up shown on line 19 is an overrecovery of \$19,979,456.

1 Q. Is this true-up calculation consistent with the true-up methodology
2 used for the other cost recovery clauses?

3 A. Yes it is. The calculation of the true-up amount follows the
4 procedures established by this Commission as set forth on
5 Commission Schedule A-2 "Calculation of True-Up and Interest
6 Provision" for the Fuel Cost Recovery Clause.

7
8 Q. Please explain the calculation of the interest provision.

9 A. Appendix II, page 5, entitled "Calculation of Interest Provision",
10 shows the calculation of the interest provision for the period
11 October 1994 through March 1995 and follows the same
12 methodology used in calculating the interest provision for the other
13 cost recovery clauses, as previously approved by this Commission.

14
15 The interest provision is the result of multiplying the monthly
16 average true-up (line 4) by the monthly average interest rate (line
17 9). The average interest rate is developed using the 30 day
18 commercial paper rate as published in the Wall Street Journal on
19 the first business day of the current and subsequent months. The
20 interest calculated during the period amounts to \$649,218 as shown
21 on line 10.

22
23 Q. Have you provided a schedule showing the variances between
24 actuals and estimated/actuals?

1 A. Yes. Appendix II, page 6, entitled "Calculation of Final True-up
2 Variances", shows the actual capacity charges and applicable
3 revenues compared to the estimated/actuals for the period October
4 1994 through March 1995.

5

6 Q. What was the variance in net capacity charges?

7 A. As shown on line 6, actual net capacity charges on a Total
8 Company basis were \$0.9 million lower than the estimated/actual
9 projection. This variance was primarily due to lower than expected
10 capacity payments to the Southern Company for Unit Power Sales
11 (UPS). The actual UPS capacity charges were \$1.1 million lower
12 than the estimated/actual projection primarily due to common
13 investment for the Miller units being lower than projected.

14

15 Q. What was the variance in Capacity Cost Recovery revenues?

16 A. As shown on line 13, actual Capacity Cost Recovery revenues, net
17 of revenue taxes, were \$3.9 million higher than the estimated/actual
18 projection. This increase was primarily due to higher jurisdictional
19 kWh sales than projected. Jurisdictional sales were 238,029,837
20 kWh (.69%) higher than estimated/actual projection.

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OIL BACKOUT COST RECOVERY CLAUSE (OB)

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Q. Please explain the calculation of the Net True-up Amount.

A. Appendix III, page 3, entitled "Summary of Net True-Up Amount", shows the calculation of the Net True-Up for the period, an underrecovery of \$6,647, which I am requesting be included in the calculation of the Oil Backout Cost Recovery Factor for the period October 1995 through March 1996.

The actual End-of-Period underrecovery of \$522,576, shown on line 1 less the estimated/actual End-of-Period underrecovery of \$515,929, shown on line 2 that was included in the Oil Backout Cost Recovery Factor for the period April 1995 through September 1995, result in the Net True-Up shown on line 3, an underrecovery of \$6,647.

Q. What is the purpose of the schedule showing kWh sales?

A. The purpose of the schedule showing kWh sales on page 5, is to calculate the monthly percentage of retail (jurisdictional) kWh sales to total kWh sales. This monthly percentage (jurisdictional factor) is used to allocate costs between retail and wholesale customers. These kWh sales are consistent with the kWh sales shown in the FCR and CCR schedules.

- 1 Q. Have you provided a schedule showing the calculation of the End-
2 of-Period true-up?
- 3 A. Yes. Appendix III, page 6, entitled "True-up Calculation" shows the
4 calculation of the OB End-of-Period true-up for the period October
5 1994 through March 1995. The End-of-Period true-up shown on line
6 12, is an underrecovery of \$522,576.
- 7
- 8 Q. Is this true-up calculation consistent with the true-up methodology
9 used for the other cost recovery clauses?
- 10 A. Yes it is. The calculation of the true-up amount follows the
11 procedures established by this Commission as set forth on
12 Commission Schedule A-2 "Calculation of True-Up and Interest
13 Provision" for the Fuel Cost Recovery Clause.
- 14
- 15 Q. Please explain the calculation of the interest provision.
- 16 A. Appendix III, page 7, shows the calculation of the interest provision
17 for the period October 1994 through March 1995 and is consistent
18 with the procedures used in calculating the interest for the FCR and
19 CCR clauses. The interest calculated for the period is \$1,912, as
20 shown on line 10.
- 21
- 22 Q. Have you provided a schedule showing the variances between
23 actuals and estimated/actuals?
- 24 A. Yes. Appendix III, page 8, entitled "Calculation of Final True-up

1 **Variances", shows the actual Oil Backout costs and revenues**
2 **compared to the estimated/actuals for the period October 1994**
3 **through March 1995.**

4

5 **Q Have you provided a schedule explaining the reasons for these**
6 **variances?**

7 **A Yes. Pages 9 and 10, of Appendix III, provide a more detailed**
8 **analysis of the variances with corresponding explanations.**

9

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

11 **A. Yes, it does.**

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF BARRY T. BIRKETT

DOCKET NO. 950001-EI

JUNE 20, 1995

1 Q. Please state your name and address.

2 A. My name is Barry T. Birkett and my business address is 9250 West
3 Flagler Street, Miami, Florida 33174.

4

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

6 A. I am employed by Florida Power & Light Company (FPL) as the
7 Manager of Rates and Tariff Administration.

8

9 Q. Have you previously testified in this docket?

10 A. Yes, I have.

11

12 Q. What is the purpose of your testimony?

13 A. The purpose of my testimony is to present for Commission review and
14 approval the fuel factors, the capacity payment factors and the oil
15 backout factor for the Company's rate schedules, including the Time
16 of Use rates, for the period October 1995 through March 1996. The
17 calculation of the fuel factors is based on projected fuel cost and
18 operational data as set forth in Commission Schedules E1 through

1 E10, H1 and other exhibits filed in this proceeding and data previously
2 approved by the Commission. I am providing updated projections of
3 avoided energy costs for purchases from small power producers and
4 cogenerators and updated ten year projection of Florida Power & Light
5 Company's annual generation mix and fuel prices.

6
7 In addition, my testimony presents the schedules necessary to support
8 the calculation of the Estimated/Actual True-up amounts for the Fuel
9 Cost Recovery Clause (FCR), Capacity Cost Recovery Clause(CCR),
10 and Oil Backout Cost Recovery Clause (OB), for the period April 1995
11 through September 1995.

12
13 **Q. Have you prepared or caused to be prepared under your**
14 **direction, supervision or control an exhibit in this proceeding?**

15 **A.** Yes, I have. It consists of various schedules included in Appendices
16 II, III, IV, and V. Appendices II and III contain the FCR related
17 schedules, Appendix IV contains the capacity related schedules, and
18 Appendix V contains the Oil-backout related schedules.

19
20 Appendix III contains the Commission Schedules A1 through A9 for
21 April and May 1995. These schedules were prepared by various
22 departments including Power Supply, Rates, Power Generation and
23 Accounting, and present a monthly comparison between the original
24 projections and the actual generation, sales and fuel costs for the two

1 months.

2

3 **Q. What is the source of the data which you will present by way of**
4 **testimony or exhibits in this proceeding?**

5 A. Unless otherwise indicated, the actual data is taken from the books
6 and records of FPL. The books and records are kept in the regular
7 course of our business in accordance with generally accepted
8 accounting principles and practices and provisions of the Uniform
9 System of Accounts as prescribed by this Commission.

10

11

FUEL COST RECOVERY CLAUSE

12 **Q. What is the proposed levelized fuel factor for which the Company**
13 **requests approval?**

14 A. 1.769¢ per kWh. Schedule E1, Page 3 of Appendix II shows the
15 calculation of this six-month levelized fuel factor. Schedule E2, Page
16 10 of Appendix II indicates the monthly fuel factors for October 1995
17 through March 1996 and also the six-month levelized fuel factor for the
18 period.

19

20 **Q. Has the Company developed a six-month levelized fuel for its**
21 **Time of Use rates?**

22 A. Yes. Schedule E1-D, Page 8 of Appendix II provides a six-month
23 levelized fuel factor of 1.812¢ per kWh on-peak and 1.754¢ per kWh
24 off-peak for our Time of Use rate schedules.

1 Q. Were these calculations made in accordance with the procedures
2 previously approved in this Docket?

3 A. Yes, they were.
4

5 Q. What adjustments are included in the calculation of the six-
6 month levelized fuel factor shown on Schedule E1, Page 3 of
7 Appendix II?

8 A. As shown on line 28 of Schedule E1, Page 3, of Appendix II the
9 estimated/actual fuel cost underrecovery for the April 1995 through
10 September 1995 period amounts to \$50,864,415. This
11 estimated/actual underrecovery for the April 1995 through September
12 1995 period plus the final overrecovery \$12,465,206 for the October
13 1994 through March 1995 period results in a total underrecovery of
14 \$38,399,209. This amount, divided by the projected retail sales of
15 35,446,721 MWh for October 1995 through March 1996 results in an
16 increase of .1083¢ per kWh before applicable revenue taxes. In his
17 testimony for the Generating Performance Incentive Factor, FPL
18 Witness R. Silva calculated a reward of \$3,109,109 for the period
19 ending March 1995, to be applied to the October 1995 through March
20 1996 period. This \$3,109,109 divided by the projected retail sales of
21 35,446,721 MWh during the projected period, results in an increase
22 of .0088¢ per kWh, as shown on line 32 of Schedule E1, Page 3 of
23 Appendix II.
24

1 Q. Please explain the calculation of the FCR Estimated/Actual True-
2 up amount you are requesting this Commission to approve.

3 A. Schedule E1-B, Page 5 of Appendix II shows the calculation of the
4 FCR Estimated/Actual True-up amount. The calculation of the
5 estimated/actual true-up amount for the April 1995 through September
6 1995 is an underrecovery, including interest, of \$50,864,415 (Column
7 g, lines D7 plus D8). This amount, when combined with the Final True-
8 up overrecovery of \$12,465,206 (Column g, line D9a) deferred from
9 the period October 1994 through March 1995, presented in my Final
10 True-up testimony filed on May 19, 1995, results in the End of Period
11 underrecovery of \$38,399,209 (Column g, line D11).

12

13 This schedule also provides a summary of the Fuel and Net Power
14 Transactions (lines A1 through A7), kWh Sales (lines C1 through C4),
15 Jurisdictional Fuel Revenues (line D1 through D3), the True-up and
16 interest calculation (lines D4 through D10) for this period, and the End
17 of Period True-up amount (line D11).

18

19 The data for April and May 1995, columns (a) and (b), reflects the
20 actual results of operations and the data for June 1995 through
21 September 1995, columns (c) through (f), are based on updated
22 estimates.

23

24 The variance calculation of the Estimated/Actual data compared to the

1 original projections for the April 1995 through September 1995 period
2 is provided in Schedule E1-B-1, Page 6 of Appendix II.

3
4 As shown on line A1 the variance in fuel cost of system net generation
5 is \$49.9 million. This is mainly due to an increase in heavy oil costs
6 and generation. The heavy oil cost increase is primarily due to higher
7 demand for heavy fuel oil in Mexico and Asia and less supply of
8 residual fuel oil as refiners are trying to meet higher gasoline demand
9 in the U.S. The increase in heavy oil generation is primarily due to an
10 85.2% increase in heavy oil generation (see Appendix III, Schedule
11 A3, page 7) in the month of May 1995 due to a 7.4% increase in sales
12 (see Appendix III, Schedule A2, page 5).

13
14 The true-up calculations follow the procedures established by this
15 Commission as set forth on Commission Schedule A2 "Calculation of
16 True-Up and Interest Provision" filed in this proceeding in Appendix III.

17
18 **Q. Has FPL included any other cost in the calculation of the fuel
19 charge?**

20 **A.** Yes. FPL has included the depreciation and return on investment in
21 rail cars that it purchased to deliver coal to the Scherer Plant
22 consistent with Order No. 14546 in Docket No. 850001-EI-B which
23 allows for the recovery of "transportation costs to the utility system".
24 Specifically, Appendix A of the Order, Nos. 06 - 08 address rail car

1 expenses and state that the fuel clause is the appropriate method for
2 recovery. FPL has included these costs to be recovered through the
3 fuel clause in the same manner as the rail cars used to deliver coal to
4 the St. John River Power Park (SJRPP). Mr. Silva's testimony
5 discusses FPL's decision to purchase 462 rail cars to deliver Western
6 coal to its Scherer Unit No. 4 , and thereby achieve significant
7 savings.

8

9 **Q. Is FPL requesting that any other costs be recovered through the**
10 **Fuel Cost Recovery Clause?**

11 A. Yes. FPL is requesting to defer \$2.7 million in implementation costs
12 associated with changing from an 18 month fuel cycle operation to a
13 24 month fuel cycle operation of St. Lucie Units 1 and 2. FPL proposes
14 to recover these costs through the Fuel Cost Recovery Clause in
15 1998, the same time that the fuel savings are realized by the
16 customers. The change from an 18 month fuel cycle operation to a 24
17 month fuel cycle is discussed in more detail in the testimony of Claude
18 Villard.

19

20 **Q. What is the basis for requesting recovery of these**
21 **implementation costs through the Fuel Cost Recovery Clause?**

22 A. The Commission in Docket No. 850001-EI-B, Order No. 14546 issued
23 on July 8, 1985 stated, regarding the charges appropriately included
24 in the calculation of fuel "Fossil fuel-related costs normally recovered

1 through base rates but which were not recognized or anticipated in the
2 cost levels used to determine current base rates and which, if
3 expended, will result in fuel savings to customers. Recovery of such
4 costs should be made on a case by case basis after Commission
5 approval."

6
7 The fuel savings associated with changing from an 18 month fuel cycle
8 operation to a 24 month fuel cycle is projected to be \$171 million
9 through the year 2016. These expenditures will result in significant
10 fuel savings for FPL's customers and appear to be the type of a cost
11 which the Commission contemplated being recovered through the
12 clause. For these reasons, FPL believes that it is appropriate to bring
13 this issue forward for Commission consideration and approval.

14
15 **Q. What is shown on Pages 36-39 of Appendix II?**

16 A. Pages 36-39 of Appendix II contain revised Tariff Schedules COG-1
17 and COG-2. These tariff sheets contain, for informational purposes,
18 updated projections of avoided energy costs for purchases from small
19 power producers and cogenerators.

20
21 **Q. What is shown on Page 40 of Appendix II?**

22 A. Page 40 of Appendix II shows the revised loss factors for each rate
23 group and for the retail sales in accordance with the annual energy
24 loss report for 1994. The Company requests approval of these loss

1 factors for the calculation of any fuel factors applicable to each rate
2 group.

3

4

CAPACITY PAYMENT RECOVERY CLAUSE

5 **Q. Please describe Page 3 of Appendix IV.**

6 A. Page 3 of Appendix IV provides a summary of the requested capacity
7 payments for the projected period of October 1995 through March
8 1996. Total recoverable capacity payments amount to \$218,222,960
9 and include payments of \$110,474,638 to non-cogenerators and
10 payments of \$138,261,934 to cogenerators. This amount is offset by
11 revenues from capacity sales of \$1,321,508 and \$28,472,796 of
12 jurisdictional capacity related payments included in Base Rates plus
13 the net underrecovery of \$2,615,886 reflected on line 8. The net
14 underrecovery of \$2,615,886 includes the final overrecovery of
15 \$4,856,873 for the October 1994 through March 1995 period less the
16 estimated/actual underrecovery of \$7,472,759 for the April 1995
17 through September 1995 period.

18

19 **Q. Please describe Page 4 of Appendix IV.**

20 A. Page 4 of Appendix IV calculates the allocation factors for demand
21 and energy at generation. The demand allocation factors are
22 calculated by determining the percentage each rate class contributes
23 to the monthly system peaks. The energy allocators are calculated by
24 determining the percentage each rate contributes to total kWh sales,

1 as adjusted for losses, for each rate class.

2

3 **Q. Please describe Page 5 of Appendix IV.**

4 A. Page 5 of Appendix IV presents the calculation of the proposed
5 Capacity Payment Recovery Clause (CCR) factors by rate class.

6

7 **Q. Please explain the calculation of the CCR Estimated/Actual True-
8 up amount you are requesting this Commission to approve.**

9 A. Appendix IV, page 6, shows the calculation of the CCR
10 Estimated/Actual True-up amount. The Estimated/Actual True-up for
11 the period April 1995 through September 1995 is an underrecovery,
12 including interest, of \$7,472,759 (Column 7, lines 14 plus 15). This
13 amount, plus the Final True-up overrecovery of \$4,856,873 (Column
14 7, line 17) deferred from the period October 1994 through March 1995,
15 presented in my Final True-up testimony filed on May 19, 1995, results
16 in the End of Period underrecovery of \$2,615,886 (Column 7, line 19).

17

18 **Q. Is this true-up calculation consistent with the true-up
19 methodology used for the other cost recovery clauses?**

20 A. Yes it is. The calculation of the true-up amount follows the procedures
21 established by this Commission as set forth on Commission Schedule
22 A2 "Calculation of True-Up and Interest Provision" for the Fuel Cost
23 Recovery clause.

24

1 The resulting underrecovery of \$2,615,886 has been included in the
2 calculation of the Capacity Cost Recovery factor for the period
3 October 1995 through March 1996.

4

5 **Q. Please explain the calculation of the Interest Provision.**

6 A. Appendix IV, page 7, shows the calculation of the interest provision
7 and follows the same methodology used in calculating the interest
8 provision for the other cost recovery clauses, as previously approved
9 by this Commission.

10

11 The interest provision is the result of multiplying the monthly average
12 true-up amount (line 4) times the monthly average interest rate (line 9).
13 The average interest rate for the months reflecting actual data is
14 developed using the 30 day commercial paper rate as published in the
15 Wall Street Journal on the first business day of the current and
16 subsequent months. The average interest rate for the projected
17 months is the actual rate as of the first business day in June 1994.

18

19 **OIL BACKOUT COST RECOVERY CLAUSE (OB)**

20 **Q. Please explain the calculation of the OB Factor you are**
21 **requesting this Commission to approve.**

22 A. Appendix V, page 3, shows the derivation of the OB Factor of .013
23 cents per kWh requested for the projected period October 1995
24 through March 1996. This Factor represents the \$4,333,094 in

1 projected costs divided by the total kWh sales projected for the period,
2 less the End of Period underrecovery of \$138,014, divided by the retail
3 kWh sales projected for the period October 1995 through March 1996.
4 The resulting factor was then multiplied by the Revenue Tax Factor to
5 arrive at the OB Factor for the period. Both the Revenue Tax Factor
6 and the kWh sales are the same as those used in our Fuel Cost
7 Recovery Clause included in this filing.

8
9 **Q. What are the projected costs requested for recovery through the**
10 **OB Factor for the period October 1995 through March 1996?**

11 **A.** Appendix V, page 4, reflects the total projected costs requested for
12 recovery for the period. These costs consist solely of the 500 kV
13 Transmission Line Project (Project) revenue requirements, which total
14 \$4,333,094 for the projected period.

15
16 As detailed on page 4, the Project revenue requirements include a
17 return on investment, taxes other than income taxes, income taxes,
18 and O&M expenses. No depreciation is included since the capital
19 investment in the 500 kV line was fully depreciated in October 1989.
20 A detailed description of the methodology used to calculate the
21 revenue requirements of the Project was included in E.L. Hoffman's
22 testimony, Document No. 1 for the February 1983 hearing.

23
24

1 **Q. Have you also presented the Estimated/Actual costs for the**
2 **period April 1995 through September 1995?**

3 A. Yes, Appendix V, page 6, shows the components of the \$4,331,718
4 Estimated/Actual Project revenue requirements requested for the
5 period. It contains similar information as that described in the previous
6 paragraph, except it reflects two months actual data and four months
7 updated estimates.

8
9 **Q. What is the purpose of the schedules showing kWh sales?**

10 A. The purpose of the schedules showing kWh sales on pages 5 and 7,
11 is to show the calculation of the monthly percentage of retail
12 (jurisdictional) kWh sales to total kWh sales, for the projected and
13 Estimated/Actual periods respectively. These monthly percentages
14 (jurisdictional factor) are used to allocate costs between retail and
15 wholesale customers. The kWh sales reflected on these schedules
16 are consistent with the kWh sales shown in the FCR and CCR
17 schedules.

18
19 **Q. Please explain the calculation of the OB Estimated/Actual True-**
20 **up amount you are requesting this Commission to approve.**

21 A. Appendix V, page 8, shows the calculation of the OB Estimated/Actual
22 True-up amount. The Estimated/Actual True-up for OB is an
23 underrecovery, including interest, of \$131,367 (Column 9, lines 7 plus
24 8). This amount, when combined with the Final True-up underrecovery

1 of \$6,647 (Column 9, line 10) deferred from the period October 1994
2 through March 1995, presented in my Final True-up testimony filed on
3 May 19, 1995, results in the End of Period underrecovery of \$138,014
4 (Column 9, line 12).

5

6 **Q. Please explain the calculation of the interest provision.**

7 A. Appendix V, page 9, shows the calculation of the interest provision for
8 the period April 1995 through September 1995 and is consistent with
9 the procedures used in calculating the interest for the FCR and CCR
10 clauses. The interest as result of net underrecoveries during the
11 period is \$13,231 as shown on line 10.

12

13 **Q. Have you provided a schedule showing the variances between**
14 **Estimated/Actuals and the Original Projections?**

15 A. Yes. Appendix V, page 10, entitled "Calculation of Estimated/Actual
16 True-up Variances", shows the estimated/actual Oil Backout costs and
17 revenues compared to the original projections for the period April 1995
18 through September 1995.

19

20 **Q. Have you provided a schedule explaining the reasons for these**
21 **variances?**

22 A. Yes. Pages 11 and 12, of Appendix V, provide a more detailed
23 analysis of the variances with corresponding explanations for
24 Revenue Requirements, and Jurisdictional kWh Sales, respectively.

1 **Q. What effective date is the Company requesting for the new**
2 **factors?**

3 **A.** The Company is requesting that the new factors become effective with
4 customer billings on cycle day 3 of October 1995 and continue through
5 Customer billings on cycle day 2 of April 1996. This will provide for 6
6 months of billing on these factors for all our customers.

7

8 **Q. What will be the charge for a Residential customer using 1,000**
9 **kWh effective October 1995?**

10 **A.** The total residential bill, excluding taxes and franchise, for 1,000 kWh
11 will be \$75.69. The base bill for 1,000 residential kWh is \$47.38, the
12 fuel cost recovery charge from Schedule E1-E, Page 9 of Appendix II
13 for a residential customer is \$17.73, the Conservation charge is \$2.51,
14 the Oil Backout charge is \$.13, the Capacity Recovery charge is
15 \$6.94, the Environmental Cost Recovery charge is \$.23 and the Gross
16 Receipt Tax is \$.77. A Residential Bill Comparison (1000kWh) is
17 presented in Schedule E10, Page 34 of Appendix II.

18

19 **Q. Does this conclude your testimony.**

A. Yes, it does.

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 950001-EI
CONTINUING SURVEILLANCE AND REVIEW OF
FUEL COST RECOVERY CLAUSES OF ELECTRIC UTILITIES

Direct Testimony of
Cheryl Martin
On Behalf of
Florida Public Utilities Company

- 1 Q. Please state your name and business address.
- 2 A. Cheryl Martin, 401 South Dixie Highway, West Palm Beach, FL
3 33401.
- 4 Q. By whom are you employed?
- 5 A. I am employed by Florida Public Utilities Company.
- 6 Q. Have you previously testified in this Docket?
- 7 A. No.
- 8 Q. What is the purpose of your testimony at this time?
- 9 A. I will briefly describe the basis for the computations that
10 were made in the preparation of the various Schedules that we
11 have submitted in support of the October 1995 - March 1996 fuel
12 cost recovery adjustments for our two electric divisions. In
13 addition, I will advise the Commission of the projected
14 differences between the revenues collected under the levelized
15 fuel adjustment and the purchased power costs allowed in
16 developing the levelized fuel adjustment for the period April
17 1995 - September 1995 and to establish a "true-up" amount to be
18 collected or refunded during October 1995 - March 1996.
- 19 Q. Were the schedules filed by your Company completed under your
20 direction?
- 21 A. Yes.

- 1 Q. Which of the Staff's set of schedules has your company
2 completed and filed?
- 3 A. We have filed Schedules E1, E1A, E1-B, E1B-1, E2, E7, E8 and
4 E10 for Marianna and Fernandina Beach. They are included in
5 Composite Prehearing Identification Number CMM-1.
6 These schedules support the calculation of the levelized fuel
7 adjustment factor for October 1995 - March 1996. Schedule E1-B
8 shows the Calculation of Purchased Power Costs and Calculation
9 of True-Up and Interest Provision for the period April 1995 -
10 September 1995 based on 2 Months Actual and 4 Months Estimated
11 data.
- 12 Q. In derivation of the projected cost factor for the October 1995
13 - March 1996 period, did you follow the same procedures that
14 were used in the prior period filings?
- 15 A. Yes.
- 16 Q. Why has the GSLD rate class for Fernandina Beach been excluded
17 from these computations?
- 18 A. Demand and other purchased power costs are assigned to the GSLD
19 rate class directly based on their actual CP KW and their
20 actual KWH consumption. That procedure for the GSLD class has
21 been in use for several years and has not been changed herein.
22 Costs to be recovered from all other classes is determined
23 after deducting from total purchased power costs those costs
24 directly assigned to GSLD.
- 25 Q. How will the demand cost recovery factors for the other rate

- 1 classes be used?
- 2 A. The demand cost recovery factors for each of the RS, GS, GSD
3 and OL-SL rate classes will become one element of the total
4 cost recovery factor for those classes. All other costs of
5 purchased power will be recovered by the use of the levelized
6 factor that is the same for all those rate classes. Thus the
7 total factor for each class will be the sum of the respective
8 demand cost factor and the levelized factor for all other
9 cost.
- 10 Q. What are the total cost recovery factors for those rate classes
11 in Fernandina Beach beginning October 1, 1995 after adjustments
12 for line losses multipliers and the revenue tax factor?
- 13 A. The factors are as follows:
- | | |
|------------|---------------|
| 14 RS | .05228 \$/KWH |
| 15 GS | .05292 \$/KWH |
| 16 GSD | .04500 \$/KWH |
| 17 OL & SL | .04123 \$/KWH |
- 18 Q. Please address the calculation of the total true-up amount to
19 be collected or refunded during the October 1995 - March 1996
20 period.
- 21 A. We have determined that at the end of September 1995 based on
22 two months actual and four months estimated, we will have
23 over-recovered \$31,424 in purchased power costs in our Marianna
24 division. Based on estimated sales for the period October 1995
25 - March 1996, it will be necessary to subtract .02553¢ per KWH

- 1 to refund this over-recovery.
- 2 In Fernandina Beach we will have over-recovered \$13,938 in
3 purchased power costs. This amount will be refunded at .01303¢
4 per KWH during the October 1995 - March 1996 period. Page 3
5 and 12 of Composite Prehearing Identification Number CMM-1
6 provides a detail of the calculation of the true-up amounts.
- 7 Q. Looking back upon the October 1994 - March 1995 period, what
8 were the actual End of Period - True-Up amounts for Marianna
9 and Fernandina Beach, and their significance, if any?
- 10 A. The Marianna Division experienced an under-recovery of \$77,221
11 and Fernandina Beach Division over-recovered \$223,977. The
12 amounts both represent fluctuations of less than 10% from the
13 total fuel charges for the period and are not considered
14 significant variances from projections.
- 15 Q. What are the final remaining true-up amounts for the period
16 October 1994 through March 1995 for both divisions?
- 17 A. In Marianna the final remaining true-up amount was an over-
18 recovery of \$66,717. The final remaining true-up amount for
19 Fernandina Beach was an over-recovery of \$86,437.
- 20 Q. What are the estimated true-up amounts for the period of April
21 1995 through September 1995?
- 22 A. In Marianna, there is an estimated under-recovery of \$35,293.
23 Fernandina Beach has an estimated under-recovery of \$72,499.
- 24 Q. What will the total fuel adjustment factor, excluding demand
25 cost recovery, be for both divisions for the period October

- 1 1995 - March 1996?
- 2 A. In Marianna the total fuel adjustment factor as shown on Line
3 33, Schedule E1, is 2.819¢ per KWH. In Fernandina Beach the
4 total fuel adjustment factor for "other classes", as shown on
5 Line 43, Schedule E1, amounts to 3.612¢ per KWH.
- 6 Q. Please advise what a residential customer using 1,000 KWH will
7 pay for the period October 1995 - March 1996 including base
8 rates (which include revised conservation cost recovery
9 factor and fuel adjustment factor and after application of a
10 line loss multiplier.
- 11 A. In Marianna a residential customer using 1,000 KWH will pay
12 \$71.14, a decrease of \$2.83 from the previous period. In
13 Fernandina Beach a customer will pay \$72.33, an increase of
14 \$1.94 from the previous period.
- 15 Q. Does this conclude your testimony?
- 16 A. Yes.
- 17 Disk 19
- 18 cmmtest6.95

1 GULF POWER COMPANY

2 Before the Florida Public Service Commission

3 Prepared Direct Testimony of

4 M. L. Gilchrist

5 Docket No. 950001-EI

6 Date of Filing: May 19, 1995

7 Q. Please state your name and business address.

8 A. My name is Malcolm Lane Gilchrist and my business address is 500
9 Bayfront Parkway, Post Office Box 1151, Pensacola, Florida 32520-0328.

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

11 A. I am the Manager of Fuel and Environmental Affairs for Gulf Power
12 Company.

13 Q. Mr. Gilchrist, will you please describe your education and experience?

14 A. I graduated from Auburn University in 1958 with a Bachelor of Science
15 Degree in Electrical Engineering. I joined Gulf Power Company in 1961
16 as a Field Engineer. Since then, I have held various positions with the
17 Company, including Power Sales Engineer; Division Sales Supervisor;
18 Division Engineer; Supervisor of Fuel Supply; Assistant Plant Manager,
19 Crist Electric Generating Plant; and Manager of Interchange and Fuel
20 Supply. I was promoted to my present position in June 1989.

21 Q. What are your duties as Manager of Fuel and Environmental Affairs?

22 A. I manage the fuel supply and environmental compliance activities of the
23 Company. My responsibilities include fuel procurement, contract
24 administration, and budgeting.
25

1 Q. Are you the same Malcolm Lane Gilchrist who has previously testified
2 before this Commission on various fuel matters?

3 A. Yes.

4

5 Q. Mr. Gilchrist, what is the purpose of your testimony in this docket?

6 A. The purpose of my testimony is to summarize Gulf Power Company's fuel
7 expenses and to certify that these expenses were properly incurred during
8 the period October 1994 through March 1995. Also, it is my intent to be
9 available to answer any questions that may arise among the parties to this
10 docket concerning Gulf Power Company's fuel expenses.

11

12 Q. Have you prepared an exhibit that contains information to which you will
13 refer in your testimony?

14 A. Yes. I have prepared an exhibit consisting of one Schedule.

15

16 Counsel: We ask that Mr. Gilchrist's exhibit consisting of 1 schedule
17 be marked as Exhibit No. 20 (MLG-1).

18

19 Q. During the period October 1, 1994, through March 31, 1995, how did Gulf's
20 actual fuel expenses compare with the budget or projected expenses?

21 A. Gulf's actual fuel expense was \$87,631,975 as compared with the
22 projected amount of \$111,500,080, or under our estimate by 21.41%.
23 Gulf's total net system generation was 4,298,211 MWH compared to the
24 projected generation of 5,907,450 MWH or 27.24% less than predicted.

25

1 The resulting total fuel cost per KWH generated was 2.0388¢/KWH or
2 8.02% over the projected amount of 1.8874¢/KWH.

3

4 Q. Mr. Gilchrist, did Gulf Power make any significant changes in its fuel
5 purchasing program during the six months ending March 1995?

6 A. No. Peabody CoalSales is supplying a blend of Venezuelan and Illinois
7 coal sufficiently low in sulfur content to ensure compliance with Phase I of
8 the Clean Air Act which became effective January 1, 1995.

9

10 Q. How did the projected purchase cost of coal compare with the actual
11 cost?

12 A. For the period, Gulf's average unit cost of coal purchased was 6.22%
13 greater than projected.

14

15 Q. What caused Gulf's average unit cost of coal purchased to be 6.22%
16 greater than projected?

17 A. Gulf Power's unit cost of coal was up due to a drop in generation,
18 resulting in the purchase of a lesser amount of spot market coal to reduce
19 the overall unit cost.

20

21 Q. What coal supply changes are taking place at Plant Daniel?

22 A. The current fuel supply program, called the seasonal Powder River Basin
23 (PRB) fuel program, was implemented in 1994 as a cost-saving strategy
24 for Plant Daniel. During the off peak season, when full plant capacity is
25 not normally needed, the plant will burn lower cost PRB coal. During the

1 peak season, when full plant capacity is required, the plant will burn high
2 Btu western coal. To date, the seasonal fuel program is working very
3 well.

4
5 Q. Do you mean that Plant Daniel will operate below its rated capacity on
6 PRB coal?

7 A. Yes. Plant Daniel is unable to reach its rated capacity while burning PRB
8 coals. However, high Btu coal is being stockpiled so that the units can be
9 changed over within 8-10 hours and achieve full capacity if needed. As
10 the plant gains experience in burning the PRB coal, we expect the plant to
11 increase its capacity. Plant Daniel has been transitioning to the seasonal
12 PRB coal supply during 1994.

13
14 Q. How much spot coal did Gulf Power Company purchase during the period
15 ending March 31, 1995?

16 A. Gulf purchased 333,219 tons or 18% of its supply from the spot coal
17 market. My Schedule 1 of Exhibit No. 20 (MLG-1) consists of a
18 list of contract and spot coal suppliers for the period ending March 31,
19 1995.

20
21 Q. How are coal prices determined under Gulf's long-term contracts?

22 A. Under all of Gulf's long-term coal contracts, Gulf pays a base price per ton
23 plus cost escalations that have occurred since the coal contract began.
24 The base price with cost escalations type contract is a long term
25 agreement on quantity, quality, and escalation factors that provides the

1 buyer with an assured source of coal of known quality. The price of coal
2 supplied under this type of contract will not go up and down with current
3 market conditions.

4

5 Q. Should Gulf's fuel purchase cost for the period be accepted as reasonable
6 and prudent?

7 A. Yes. Gulf's coal purchases were either from coal vendors with long term
8 contracts subject to cost escalations or from a competitively bid spot
9 purchase order. These coal vendors were selected by procedures
10 designed to provide an assured quantity of coal of a known quality for a
11 specific term at the lowest available delivered cost. Gulf has administered
12 the provisions of these contracts and purchase orders appropriately. All
13 of Gulf's oil purchases were from oil vendors selected by open bids to
14 insure the most economical price of oil.

15

16 Q. Mr. Gilchrist, does this conclude your testimony?

17 A. Yes.

18

19

20

21

22

23

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1 GULF POWER COMPANY

2 Before the Florida Public Service Commission
3 Prepared Direct Testimony of
4 M. L. Gilchrist
5 Docket No. 950001-EI
6 Date of Filing June 16, 1995

7 Q. Please state your name and business address.

8 A. My name is M. L. Gilchrist, and my business address is 500 Bayfront
9 Parkway, Pensacola, Florida, 32520-0328.

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

11 A. I am Manager of Fuel and Environmental Affairs for Gulf Power Company.

12
13 Q. Mr. Gilchrist, will you please describe your education and experience?

14 A. I graduated from Auburn University in 1958 with a Bachelor of Science
15 Degree in Electrical Engineering. I joined Gulf Power Company in 1961
16 as a Field Engineer. Since then, I have held various positions with the
17 Company, including Power Sales Engineer, Division Sales Supervisor,
18 Division Engineer, Supervisor of Fuel Supply, Assistant Plant Manager at
19 Crist Electric Generating Plant, and Manager of Interchange and Fuel
20 Supply. I was promoted to my present position June 1, 1989.

21
22 Q. What are your duties as Manager of Fuel and Environmental Affairs?

23 A. I manage the fuel supply and environmental compliance activities of the
24 Company. My responsibilities include fuel procurement, fuel contract
25 administration, and fuel budgeting.

1 Q. Are you the same Lane Gilchrist who has previously testified before this
2 Commission on various fuel matters?

3 A. Yes.
4

5 Q. Mr. Gilchrist, what is the purpose of your testimony in this docket?

6 A. The purpose of my testimony is to support Gulf Power Company's
7 projection of fuel expenses for the period October 1, 1995 to March 31,
8 1996 and to be available to answer any questions that may occur
9 concerning the Company's fuel procurement
10

11 Q. Have you prepared an exhibit that contains information to which you will
12 refer in your testimony?

13 A. Yes. I have prepared an exhibit consisting of one schedule. Schedule 1
14 of my exhibit is a tabulation of projected and actual fuel cost for the past
15 ten years. The purpose of this schedule is to illustrate the accuracy of our
16 short term projections of fuel expenses.
17

18 COUNSEL: We ask that Mr. Gilchrist's exhibit, consisting of one
19 schedule, be marked as Exhibit No. 21 (MLG-2).
20

21 Q. Has Gulf Power Company made any changes to its projection methods
22 for this period?

23 A. No.
24
25

1 Q. Will there be any major changes in Gulf's fuel purchasing program during
2 this period?

3 A. No. Gulf will continue to receive contract coal from Peabody CoalSales.
4 The Company will supplement these receipts with purchases from the
5 spot market.
6

7 Q. How much spot market coal does Gulf Power project it will purchase
8 during October 1995 through March 1996?

9 A. We are projecting the purchase of approximately 463,895 tons. This
10 represents approximately 19% of our projected purchase requirements.
11

12 Q. Mr. Gilchrist, does this conclude your testimony?

13 A. Yes.
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GULF POWER COMPANY

Before the Florida Public Service Commission
Direct Testimony of
M. W. Howell
Docket No. 950001-EI
Date of Filing: May 19, 1995

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6 Q. Please state your name, business address and occupation.

7 A. My name is M. W. Howell, and my business address is 500
8 Bayfront Parkway, Pensacola, Florida 32501. I am
9 Manager of Transmission and System Control for Gulf
10 Power Company.

11
12 Q. Have you previously testified before this Commission?

13 A. Yes. I have testified in various rate case,
14 cogeneration, territorial dispute, planning hearing,
15 fuel clause adjustment, and purchased power capacity
16 cost recovery dockets.

17
18 Q. Please summarize your educational and professional
19 background.

20 A. I graduated from the University of Florida in 1966 with
21 a Bachelor of Science Degree in Electrical Engineering.
22 I received my Masters Degree in Electrical Engineering
23 from the University of Florida in 1967, and then joined
24 Gulf Power Company as a Distribution Engineer. I have
25 since served as Relay Engineer, Manager of Transmission,

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1 Manager of System Planning, Manager of Fuel and System
2 Planning, and Manager of Transmission and System
3 Control. My experience with the Company has included
4 all areas of distribution operation, maintenance, and
5 construction; transmission operation, maintenance, and
6 construction; relaying and protection of the generation,
7 transmission, and distribution systems; planning the
8 generation, transmission, and distribution system
9 additions in the future; bulk power interchange
10 administration; overall management of fuel planning and
11 procurement; and operation of the system dispatch
12 center.

13 I have served as a member of the Engineering
14 Committee and the Operating Committee of the
15 Southeastern Electric Reliability Council, chairman of
16 the Generation Subcommittee and member of the Edison
17 Electric Institute System Planning Committee, and
18 chairman or member of a number of various technical
19 committees and task forces within the Southern electric
20 system and the Florida Electric Power Coordinating
21 Group, regarding a variety of technical issues including
22 system operations, bulk power contracts, generation
23 expansion, transmission expansion, transmission
24 interconnection requirements, central dispatch,
25 transmission system operation, transient stability,

1 underfrequency operation, generator underfrequency
2 protection, system production costing, computer
3 modeling, and others.
4

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

7 A. I will summarize Gulf Power Company's purchased power
8 recoverable costs for energy purchases and sales that
9 were incurred during the October 1, 1994 through March
10 31, 1995 recovery period. I will then compare the
11 actual costs to their projected levels for the period
12 and discuss the primary reasons for the differences.

13 I will also summarize the capacity expenses and
14 revenues that were incurred during the recovery period,
15 compare these figures to their projected levels, and
16 discuss the reasons for the differences.
17

18 Q. During the period October 1, 1994 through March 31,
19 1995, what was Gulf's actual purchased power recoverable
20 cost for energy purchases and how did it compare with
21 the projected amount?

22 A. Gulf's actual total purchased power recoverable cost for
23 energy purchases, as shown on line 12 of Schedule A-1,
24 was \$12,615,250 as compared to the projected amount of
25 \$2,335,000. This resulted in a variance above budget of

1 \$10,280,250, or 440%. The actual cost per KWH purchased
2 was 1.1635 ¢/KWH as compared to 1.8658 ¢/KWH, or 38%
3 below the projection.
4

5 Q. What were the events that influenced Gulf's purchase of
6 energy?

7 A. Gulf was able to purchase significantly more economy
8 power through the Southern electric power pool to meet
9 its load than was forecasted for the period due to the
10 availability of lower cost pool energy. Gulf purchased
11 1,084,248,708 KWH, shown on line 12 of Schedule A-1, as
12 compared to the estimate of 125,150,000 KWH, or 766%
13 more. The actual average cost was 1.1635 ¢/KWH as
14 compared to the estimate of 1.8658 ¢/KWH, a decrease of
15 0.7023 ¢/KWH from budget.

16 This average actual cost of purchases of 1.1635
17 ¢/KWH was actually 43% less per KWH than Gulf's actual
18 average fuel cost of system generation, shown on line 5,
19 which was 2.0388 ¢/KWH. Gulf's system net generation
20 was 4,298,211,000 KWH, or 27% under our estimate, but
21 was over budget in unit cost by 8%.
22
23
24
25

1 Q. During the period October 1, 1994 through March 31,
2 1995, what was Gulf's actual purchased power fuel cost
3 for energy sales and how did it compare with the
4 projected amount?

5 A. Gulf's actual total purchased power fuel cost for energy
6 sales, as shown on line 18 of Schedule A-1, was
7 \$17,850,216 as compared to the projected amount of
8 \$33,651,600. This resulted in a variance below budget
9 of \$15,801,384, or 47%. The actual fuel cost per KWH
10 sold was 1.2917 ¢/KWH as compared to 1.7530 ¢/KWH, or
11 26% below the projection.

12
13 Q. What were the events that influenced Gulf's sale of
14 energy?

15 A. Gulf's off-system sales, shown on line 18, were
16 554,687,293 KWH, or 29%, under the projection for the
17 period. These off-system sales were under the
18 projection due to Gulf's decreased sale of energy to the
19 Southern electric system power pool to meet the pool's
20 overall energy requirements. The higher cost of energy
21 available from Gulf's units compared with the cost of
22 energy generated by the other pool members caused Gulf
23 to sell less energy than budgeted to the pool for off-
24 system obligations.

25

1 Q. How are Gulf's net purchased power fuel costs affected
2 by Southern electric system energy sales?

3 A. As a member of the Southern electric system power pool,
4 Gulf Power participates in these sales. Gulf's
5 generating units are economically dispatched to meet the
6 needs of its territorial customers, the system, and
7 off-system customers.

8 Therefore, Southern system energy sales provide a
9 market for Gulf's surplus energy and generally improve
10 unit load factors. The cost of fuel used to make these
11 sales is credited against, and therefore reduces, Gulf's
12 fuel and purchased power costs.

13

14 Q. During the period October 1, 1994 through March 31,
15 1995, how did Gulf's actual net purchased power capacity
16 cost compare with the net projected cost?

17 A. In the Purchased Power Capacity Cost Recovery portion of
18 Docket No. 940001-EI, I testified that the projected net
19 purchased power capacity cost for the October 1, 1994
20 through March 31, 1995 recovery period was \$5,125,921.
21 The actual net capacity cost was \$4,891,009. This
22 represents a decrease in cost of \$234,912, or 5% less
23 than projected.

24 The projected net IIC capacity cost for the
25 October 1, 1994 through March 31, 1995 recovery period

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1 was \$5,425,921. The actual net IIC capacity cost for
2 the filing period was \$5,187,189, which is \$238,732 or
3 4% less than projected.

4 The projected Florida Power Corporation Schedule E
5 capacity revenue for the period was \$300,000. The
6 actual Schedule E capacity revenue for the recovery
7 period was \$296,180, or 1% less than projected. This
8 revenue was essentially on target for the recovery
9 period.

10

11 Q. Please explain the reasons for the IIC capacity cost
12 difference.

13 A. Gulf's actual net IIC capacity cost was less than budget
14 because the Southern electric system had less actual
15 system capacity to be equalized. Therefore, Gulf was
16 responsible for purchasing its historical load ratio
17 share of the lower system reserve capacity, enabling the
18 company have a lower IIC capacity cost.

19

20 Q. Does this conclude your testimony?

21 A. Yes.

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GULF POWER COMPANY

Before the Florida Public Service Commission
Direct Testimony of
M. W. Howell
Docket No. 950001-EI
Date of Filing: June 16, 1995

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6 Q. Please state your name, business address and occupation.

7 A. My name is M. W. Howell, and my business address is 500
8 Bayfront Parkway, Pensacola, Florida 32501. I am
9 Manager of Transmission and System Control for Gulf
10 Power Company.

11
12 Q. Have you previously testified before this Commission?

13 A. Yes. I have testified in various rate case,
14 cogeneration, territorial dispute, planning hearing,
15 fuel clause adjustment, and purchased power capacity
16 cost recovery dockets.

17
18 Q. Please summarize your educational and professional
19 background.

20 A. I graduated from the University of Florida in 1966 with
21 a Bachelor of Science Degree in Electrical Engineering.
22 I received my Masters Degree in Electrical Engineering
23 from the University of Florida in 1967, and then joined
24 Gulf Power Company as a Distribution Engineer. I have
25 since served as Relay Engineer, Manager of Transmission,

1 Manager of System Planning, Manager of Fuel and System
2 Planning, and Manager of Transmission and System
3 Control. My experience with the Company has included
4 all areas of distribution operation, maintenance, and
5 construction; transmission operation, maintenance, and
6 construction; relaying and protection of the generation,
7 transmission, and distribution systems; planning the
8 generation, transmission, and distribution system
9 additions in the future; bulk power interchange
10 administration; overall management of fuel planning and
11 procurement; and operation of the system dispatch
12 center.

13 I have served as a member of the Engineering
14 Committee and the Operating Committee of the
15 Southeastern Electric Reliability Council, chairman of
16 the Generation Subcommittee and member of the Edison
17 Electric Institute System Planning Committee, and
18 chairman or member of a number of various technical
19 committees and task forces within the Southern electric
20 system and the Florida Electric Power Coordinating
21 Group, regarding a variety of technical issues including
22 system operations, bulk power contracts, generation
23 expansion, transmission expansion, transmission
24 interconnection requirements, central dispatch,
25 transmission system operation, transient stability,

1 underfrequency operation, generator underfrequency
2 protection, system production costing, computer
3 modeling, and others.

4
5 Q. What is the purpose of your testimony in this
6 proceeding?

7 A. The purpose of my testimony is to support Gulf Power
8 Company's projection of purchased power recoverable
9 costs for energy purchases and sales and its projection
10 of purchased power capacity costs for the period
11 October, 1995 - March, 1996. I will also support the
12 company's projection of purchased power capacity costs
13 for the proposed October, 1995 - September, 1996 annual
14 recovery period.

15
16 Q. Have you prepared an exhibit that contains information
17 to which you will refer in your testimony?

18 A. Yes. My exhibit consists of one schedule to which I
19 will refer. This schedule was prepared under my
20 supervision and direction.

21 Counsel: We ask that Mr. Howell's Exhibit,
22 comprised of one Schedule, be
23 marked for identification as
24 Exhibit 22 (MWH-1).

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1 Q. What are Gulf's projected purchased power recoverable
2 costs for energy purchases and sales for the October,
3 1995 - March, 1996 recovery period?

4 A. Gulf's projected recoverable cost for energy purchases,
5 shown on line 12 of Schedule E-1 of the fuel filing, is
6 \$9,801,000. The projected fuel cost for energy sales,
7 shown on line 18 of Schedule E-1, is \$15,231,600. These
8 transactions result from Gulf's participation in the
9 coordinated operation of the Southern electric system
10 power pool. These amounts are used by Gulf's witness
11 Susan Cranmer as an input in the calculation of the fuel
12 and purchased power cost adjustment factor.

13

14 Q. What information is contained in your exhibit?

15 A. Schedule 1 of my exhibit lists the name of the power
16 contract that is included for capacity cost recovery,
17 its associated megawatt amounts, and the resulting
18 capacity dollar amounts.

19

20 Q. What power contract produces capacity transactions that
21 are recovered through Gulf's purchased power capacity
22 cost recovery factors?

23 A. The Commission has authorized the Company to include
24 capacity transactions under the Southern electric
25 system's Intercompany Interchange Contract

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1 (IIC) for recovery through the purchased power capacity
2 cost recovery factors. Gulf will have IIC capacity
3 transactions during the October, 1995 - March, 1996
4 recovery period, as well as the proposed October, 1995 -
5 September, 1996 annual recovery period. The energy
6 transactions under the contract for these periods are
7 handled for cost recovery purposes through the fuel cost
8 recovery factors. At this time, Gulf does not
9 participate in any other power contracts that would
10 produce capacity transactions during either the six
11 month or the proposed annual recovery period.

12
13 Q. Have there been any changes to the IIC with regard to
14 capacity transactions since the last recovery factor
15 adjustment proceedings?

16 A. No, there have not been any changes to the contract
17 itself. However, on November 1, 1994, in accordance
18 with both the contract and the requirements of the
19 Federal Energy Regulatory Commission (FERC), the
20 Southern electric system made its annual IIC
21 informational filing with the FERC. The informational
22 filing reflects updated historical load responsibility
23 ratios, the expected system load, and the capacity
24 amounts for 1995 that are used in the capacity
25 equalization calculation performed pursuant to the IIC

1 to determine the capacity transactions and costs for
2 each operating company. These updates have decreased
3 Gulf's projected capacity payments for October, 1995 -
4 March, 1996 recovery period by \$37,566 from what they
5 otherwise would have been prior to the update.

6 Similarly, the projected capacity payments for the
7 proposed October, 1995 - September, 1996 annual recovery
8 period have decreased by \$729,441.

9
10 Q. What are Gulf's IIC capacity transactions that are
11 projected for the October, 1995 - March, 1996 recovery
12 period?

13 A. As shown on Schedule 1 of my exhibit, capacity
14 transactions under the IIC vary from month to month.
15 IIC capacity purchases in the amount of \$7,748,129 are
16 projected for the period. There are no IIC capacity
17 sales projected for the recovery period. Therefore, the
18 Company's net capacity transactions under the IIC for
19 the period are net purchases amounting to \$7,748,129.
20 This compares to net purchases of \$1,995,968 that were
21 projected for the period April, 1995 - September, 1995.

22

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1 Q. What are Gulf's total projected net capacity
2 transactions for the October, 1995 - March, 1996
3 recovery period?

4 A. As shown on Schedule 1 of my exhibit, the net purchases
5 under the IIC will cause Gulf to have a projected net
6 capacity cost of \$7,748,129. This figure is used by Ms.
7 Cranmer as the sole input into the calculation of the
8 total capacity transactions to be recovered through the
9 purchased power capacity cost recovery factors for this
10 recovery period.

11

12 Q. Gulf is proposing to set capacity cost recovery factors
13 on an annual basis. Do you have any comments on this
14 proposal?

15 A. Yes. As discussed in the testimony of Ms. Cranmer, the
16 nature of Gulf's purchased power capacity costs
17 recovered through the purchased power capacity cost
18 recovery clause, when taken in conjunction with the
19 normal expected variation in the Company's kilowatt-hour
20 sales from one traditional six month recovery period to
21 the next, is such that there is routinely a significant
22 change in the recovery factors up and down every six
23 months. The purpose of the proposed change is to dampen
24 the swing in the factors experienced by Gulf's
25 customers.

1 Q. What are Gulf's IIC capacity transactions that are
2 projected for the proposed October, 1995 -September,
3 1996 annual recovery period?

4 A. Schedule 1 of my exhibit shows the IIC capacity
5 transactions that vary during each month of the proposed
6 annual period. IIC capacity purchases in the amount of
7 \$11,024,949 are projected for the proposed twelve month
8 period. IIC capacity sales during the same period are
9 projected to be \$525,875. The sum of these purchases
10 and sales yields the Company's net capacity transactions
11 under the IIC for the period, which are net purchases
12 amounting to \$10,499,074. This annual figure would be
13 used by Ms. Cranmer in the same manner as is the six
14 month capacity figure to calculate the total capacity
15 transactions to be recovered through the purchased power
16 capacity cost recovery factors for this proposed twelve
17 month recovery period.

18

19 Q. Does this conclude your testimony?

20 A. Yes.

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1 GULF POWER COMPANY

2 Before the Florida Public Service Commission
3 Prepared Direct Testimony of
4 Susan D. Cranmer
5 Docket No. 950001-EI
6 Fuel and Purchased Power Capacity Cost Recovery
7 Date of Filing: May 19, 1995

8 Q. Please state your name, business address and occupation.

9 A. My name is Susan Cranmer. My business address is 500
10 Bayfront Parkway, Pensacola, Florida 32501. I hold the
11 position of Supervisor of Rate Services for Gulf Power
12 Company.

13 Q. Please briefly describe your educational background and
14 business experience.

15 A. I graduated from Wake Forest University in
16 Winston-Salem, North Carolina in 1981 with a Bachelor of
17 Science Degree in Business and from the University of
18 West Florida in 1982 with a Bachelor of Arts Degree in
19 Accounting. I am also a Certified Public Accountant
20 licensed in the State of Florida. I joined Gulf Power
21 Company in 1983 as a Financial Analyst. I have held
22 various positions with Gulf including Computer Modeling
23 Analyst and Senior Financial Analyst. In 1991, I
24 assumed the position of Supervisor of Rate Services and
25 presently serve in that capacity.

1 My responsibilities include supervision of tariff
2 administration, cost of service, calculation of cost
3 recovery factors, and the regulatory filing function of
4 the Rates and Regulatory Matters Department.

5
6 Q. Have you prepared an exhibit that contains information
7 to which you will refer in your testimony?

8 A. Yes, I have.

9 Counsel: We ask that Ms. Cranmer's Exhibit
10 consisting of four schedules be
11 marked as Exhibit No. 23 (SDC-1).

12
13 Q. Are you familiar with the Fuel and Purchased Power
14 (Energy) True-up Calculation and the Purchased Power
15 Capacity Cost True-Up Calculation for the period of
16 October 1994 through March 1995 set forth in your
17 exhibit?

18 A. Yes. These documents were prepared under my
19 supervision.

20
21 Q. Have you verified that to the best of your knowledge and
22 belief, the information contained in these documents is
23 correct?

24 A. Yes, I have.

25

1 Q. What is the amount to be refunded or collected through
2 the fuel cost recovery factor in the period October 1995
3 through March 1996?

4 A. An amount to be collected of \$1,737,576 was calculated
5 as shown in Schedule 1 of my exhibit.

6

7 Q. How was this amount calculated?

8 A. The \$1,737,576 was calculated by taking the difference
9 in the estimated October 1994 through March 1995 under-
10 recovery of \$577,273 as approved in Order No.
11 PSC-95-0450-FOF-EI, dated April 6, 1995 and the actual
12 under-recovery of \$2,314,849 which is the sum of lines 7
13 and 8 shown on Schedule A-2, page 3 of 4, Period-to-date
14 of the monthly filing for March 1995.

15

16 Q. Ms. Cranmer, you stated earlier that you are responsible
17 for the Purchased Power Capacity Cost True-up
18 Calculation. Which schedules of your exhibit relate to
19 the calculation of these factors?

20 A. Schedules CCA-1, CCA-2, and CCA-3 of my exhibit relate
21 to the Purchased Power Capacity Cost True-up Calculation
22 for the period October 1994 through March 1995.

23

24

25

1 Q. What is the amount to be refunded or collected in the
2 period October 1995 through March 1996?

3 A. An amount to be collected of \$35,386 was calculated as
4 shown in Schedule CCA-1 of my exhibit.

5

6 Q. How was this amount calculated?

7 A. The \$35,386 was calculated by taking the difference in
8 the estimated October 1994 through March 1995 under-
9 recovery of \$101,423 as approved in Order No.
10 PSC-95-0450-FOF-EI, dated April 6, 1995 and the actual
11 under-recovery of \$136,809 which is the sum of lines 11
12 and 12 under the total column of Schedule CCA-2.

13

14 Q. Please describe Schedules CCA-2 and CCA-3 of your
15 exhibit.

16 A. Schedule CCA-2 shows the calculation of the actual
17 under-recovery of purchased power capacity costs for the
18 period October 1994 through March 1995. Schedule CCA-3
19 of my exhibit is the calculation of the interest
20 provision on the under-recovery. This is the same
21 method of calculating interest that is used in the Fuel
22 and Purchased Power (Energy) Cost Recovery Clause and
23 the Environmental Cost Recovery Clause.

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1 Q. Ms. Cranmer, does this complete your testimony?

2 A. Yes, it does.

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1 GULF POWER COMPANY

2 Before the Florida Public Service Commission
3 Prepared Direct Testimony of
4 Susan D. Cranmer
5 Docket No. 950001-EI
6 Fuel and Purchased Power Capacity Cost Recovery
7 Date of Filing: June 16, 1995

8 Q. Please state your name, business address and occupation.

9 A. My name is Susan Cranmer. My business address is 500
10 Bayfront Parkway, Pensacola, Florida 32501. I hold the
11 position of Supervisor of Rate Services for Gulf Power
12 Company.

13 Q. Please briefly describe your educational background and
14 business experience.

15 A. I graduated from Wake Forest University in
16 Winston-Salem, North Carolina in 1981 with a Bachelor of
17 Science Degree in Business and from the University of
18 West Florida in 1982 with a Bachelor of Arts Degree in
19 Accounting. I am also a Certified Public Accountant
20 licensed in the State of Florida. I joined Gulf Power
21 Company in 1983 as a Financial Analyst. I have held
22 various positions with Gulf including Computer Modeling
23 Analyst and Senior Financial Analyst. In 1991, I
24 assumed the position of Supervisor of Rate Services and
25 presently serve in that capacity.

1 My responsibilities include supervision of tariff
2 administration, cost of service, calculation of cost
3 recovery factors, and the regulatory filing function of
4 the Rates and Regulatory Matters Department.

5

6 Q. Have you previously filed testimony before this
7 Commission in Docket No. 950001-EI?

8 A. Yes, I have.

9

10 Q. What is the purpose of your testimony?

11 A. The purpose of my testimony is to discuss the
12 calculation of Gulf Power's fuel cost recovery factors
13 for the period October 1995 through March 1996. I will
14 also discuss the calculation of the purchased power
15 capacity cost recovery factors for that period.

16

17 Q. Are you familiar with the Fuel and Purchased Power Cost
18 Recovery Clause Calculation for the period of October
19 1995 through March 1996?

20 A. Yes, these documents were prepared under my supervision.

21

22 Q. Have you verified that to the best of your knowledge and
23 belief, the information contained in these documents is
24 correct?

25 A. Yes, I have.

1 Counsel: We ask that Ms. Cranmer's Exhibit
2 consisting of seventeen schedules,
3 along with Schedules A1 through A12
4 previously filed with the Commission for
5 the months of December 1994, January,
6 February, March, April, and May 1995,
7 be marked as Exhibit No. 24 (SDC-2).
8

9 Q. Ms. Cranmer, what has Gulf calculated as the true-up to
10 be applied in the period October 1995 through March
11 1996?

12 A. The true-up for this period is an increase of .069¢/kwh.
13 This includes a final true-up under-recovery of
14 \$1,737,576. As shown on Schedule E-1A, it also includes
15 an estimated true-up under-recovery of \$875,443 for the
16 current period. The resulting under-recovery is
17 \$2,613,019.
18

19 Q. What has been included in this filing to reflect the
20 GPIF reward/penalty for the period of October 1994
21 through March 1995?

22 A. This is shown on Line 32b of Schedule E-1 as \$0. As
23 discussed in the testimony of Mr. Fontaine, Gulf is
24 proposing neither a reward nor a penalty for the period
25 of October 1994 through March 1995.

1 Q. Ms. Cranmer, what is the levelized projected fuel factor
2 for the period October 1995 through March 1996?

3 A. Gulf has proposed a levelized fuel factor of 2.210¢/kwh.
4 It includes projected fuel and purchased power energy
5 expenses for October 1995 through March 1996 and
6 projected kwh sales for the same period, as well as the
7 true-up and GPIF amount. The proposed levelized fuel
8 factor also includes the special recovery amount
9 associated with the Air Products special contract. The
10 calculation of the special recovery amount is presented
11 on Schedule E-12 of my exhibit. The levelized fuel
12 factor has not been adjusted for line losses.

13

14 Q. Ms. Cranmer, how were the line loss multipliers used on
15 Schedule E-1E calculated?

16 A. They were calculated in accordance with procedures
17 approved in prior filings and were based on Gulf's
18 latest mwh Load Flow Allocators.

19

20 Q. Ms. Cranmer, what fuel factor does Gulf propose for its
21 largest group of customers (Group A), those on Rate
22 Schedules RS, GS, GSD, OSIII, and OSIV?

23 A. Gulf proposes a standard fuel factor, adjusted for line
24 losses, of 2.237¢/kwh for Group A. Fuel factors for

25

1 Groups A, B, C, and D are shown on Schedule E-1E. These
2 factors have also been adjusted for line losses.

3

4 Q. Ms. Cranmer, how were the time-of-use fuel factors
5 calculated?

6 A. These were calculated based on projected loads and
7 system lambdas for the period October 1995 through March
8 1996. These factors included the GPIF, true-up, and
9 special contract recovery cost amounts and were adjusted
10 for line losses. These time-of-use fuel factors are
11 also shown on Schedule E-1E.

12

13 Q. How does the proposed fuel factor for Rate Schedule RS
14 compare with the factor applicable to September and how
15 will the change affect the cost of 1000 kwh on Gulf's
16 residential rate RS?

17 A. The current fuel factor applicable to September 1995 is
18 2.343¢/kwh compared with the proposed factor of
19 2.237¢/kwh. For a residential customer who uses
20 1000 kwh in October 1995, the fuel portion of the bill
21 will decrease from \$23.43 to \$22.37.

22

23 Q. Ms. Cranmer, has Gulf updated its estimates of the
24 as-available avoided energy costs to be shown on COG1 as
25 required by Order No. 13247 issued May 1, 1984, in

1 Docket No. 830377-EI and Order No. 19548 issued June 21,
2 1988, in Docket No. 880001-EI?

3 A. Yes. A tabulation of these costs is set forth in
4 Schedule E-11 of my Exhibit SDC-2. These costs
5 represent the estimates for the period from October 1995
6 through September 1997.

7
8 Q. Ms. Cranmer, you stated earlier that you are responsible
9 for the calculation of the purchased power capacity cost
10 (PPCC) recovery factors. Which schedules of your
11 exhibit relate to the calculation of these factors?

12 A. Schedule CCE-1, including CCE-1a and CCE-1b, and
13 Schedule CCE-2 of my exhibit relate to the calculation
14 of the purchased power capacity cost recovery factors
15 for the period October 1995 through March 1996. As I
16 will discuss later in my testimony, Gulf is proposing to
17 change its PPCC factors from semi-annual to annual
18 factors. Schedule CCE-3, including CCE-3a and CCE-3b,
19 and CCE-4 show the calculation of the cost recovery
20 factors for the period October 1995 through September
21 1996.

22
23 Q. Please describe Schedule CCE-1 of your exhibit.

24 A. Schedule CCE-1 shows the calculation of the amount of
25 capacity payments to be recovered through the Purchased

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1 Power Capacity Cost Recovery Clause. Mr. Howell has
2 provided me with Gulf's projected purchased power
3 capacity transactions under the Southern Company
4 Intercompany Interchange Contract (IIC). Gulf's
5 projected capacity payments for the period October 1995
6 through March 1996 are purchases of \$7,748,129. The
7 jurisdictional amount is \$7,469,087. For the period,
8 Gulf's requested recovery before true-up is the
9 difference between the jurisdictional projected
10 purchased power capacity costs and the approved
11 adjustment for former capacity transactions embedded in
12 current base rates. This adjustment amount was fixed in
13 Order No. PSC-93-0047-FOF-EI, dated January 12, 1993, as
14 an embedded credit of \$839,290, or \$826,000 net of
15 revenue taxes. Thus, the projected recovery amount to
16 be collected through the purchased power capacity cost
17 recovery factors in the period October 1995 through
18 March 1996 is \$8,295,087. This amount is added to the
19 total true-up amount to determine the total purchased
20 power capacity transactions to be recovered through the
21 factors to be applied in the period.

22

23 Q. What has Gulf calculated as the purchased power capacity
24 factor true-up to be applied in the period October 1995
25 through March 1996?

1 A. The true-up for this period is a decrease of \$154,779 as
2 shown on Schedule CCE-1a. This includes a final
3 capacity cost true-up under-recovery of \$35,386. It
4 also includes an estimated over-recovery of \$190,165 for
5 the period April 1995 through September 1995, as
6 calculated on Schedule CCE-1b.

7
8 Q. What methodology was used to allocate the capacity
9 payments to rate class?

10 A. As required by Commission Order No. 25773 in Docket
11 No. 910794-EQ, the revenue requirements have been
12 allocated using the cost of service methodology used in
13 Gulf's last full requirements rate case and approved by
14 the Commission in Order No. 23573 issued October 3,
15 1990, in Docket No. 891345-EI. Although the capacity
16 payments in that cost of service study were allocated to
17 rate class using the demand allocator based on the
18 twelve monthly coincident peaks projected for the test
19 year, for purposes of the purchased power capacity cost
20 recovery clause, Gulf has allocated the net purchased
21 power capacity costs to rate class with 12/13th on
22 demand and 1/13th on energy. This allocation is
23 consistent with the treatment accorded to production
24 plant in the cost of service study used in Gulf's last
25 rate case.

1 Q. How were the allocation factors calculated for use in
2 the Purchased Power Capacity Cost Recovery Clause?

3 A. The allocation factors used in the Purchased Power
4 Capacity Cost Recovery Clause have been calculated using
5 the 1993 load data filed with the Commission in
6 accordance with FPSC Rule 25-6.0437. The calculations
7 of the allocation factors are shown in columns A through
8 I on page 1 of Schedule CCE-2.

9

10 Q. Please describe the calculation of the cents/kwh factors
11 by rate class used to recover purchased power capacity
12 costs.

13 A. As shown in columns A through D on page 2 of Schedule
14 CCE-2, 12/13th of the jurisdictional capacity cost to be
15 recovered is allocated to rate class based on the demand
16 allocator, with the remaining 1/13th allocated based on
17 energy. The total revenue requirement assigned to each
18 rate class shown in column E is then divided by that
19 class's projected kwh sales for the six-month period to
20 calculate the purchased power capacity cost recovery
21 factor. This factor will be applied to each customer's
22 total kwh to calculate the amount to be billed each
23 month.

24

25

1 Q. What is the amount related to purchased power capacity
2 costs recovered through this factor that would be
3 included on a residential customer's bill for 1000 kwh
4 if the Commission were to approve the Company's proposed
5 traditional six-month recovery factors?

6 A. The purchased power capacity costs recovered through the
7 clause for a residential customer who uses 1000 kwh
8 would be \$2.64.

9
10 Q. Gulf is proposing to change the cycle for setting its
11 purchased power capacity cost (PPCC) recovery factors
12 from a six-month to a one-year cycle. Please comment on
13 the reasons for the proposed change.

14 A. For Gulf, this is a customer satisfaction issue. Since
15 the commencement of the PPCC recovery clause in 1993,
16 Gulf's PPCC factors have consistently moved up and down
17 between the traditional summer (April through September)
18 and winter (October through March) recovery periods.
19 The trend we have experienced results in a much higher
20 factor in the winter than in the summer. Gulf is
21 proposing an annual factor for its PPCC recovery in
22 order to levelize the factors and thereby eliminate the
23 variations experienced by the customer that occur simply
24 because the factors have been set every six months. The
25 nature of Gulf's purchased power capacity costs

1 recovered through the PPCC combined with the regular
2 seasonal differences in kwh sales causes Gulf's PPCC
3 factors to vary significantly from one traditional six-
4 month recovery period to the next. Because Gulf's
5 capacity costs and kwh sales do not vary as widely from
6 year to year as they do from one of the current six-
7 month recovery periods to the next, the resulting
8 fluctuations in customers' bills could be significantly
9 reduced through the implementation of annual cost
10 recover, factors for Gulf's purchased power capacity
11 cost recovery clause.

12

13 Q. Please describe Schedules CCE-3 and CCE-4 of your
14 exhibit.

15 A. Schedules CCE-3 and CCE-4 show the calculation of the
16 recoverable capacity costs and associated cost recovery
17 factors for the period October 1995 through September
18 1996. The methodology used in the calculations on these
19 schedules is identical to the methodology used on
20 Schedules CCE-1 and CCE-2 to calculate the semi-annual
21 factors.

22

23 Q. What are Gulf's projected capacity payments for the
24 period October 1995 through September 1996?

25

1 A. Gulf's projected capacity payments for the period
2 October 1995 through September 1996 are purchases of
3 \$10,499,074. The jurisdictional amount is \$10,120,959.
4 For the 12-month period, the adjustment for former
5 capacity transactions embedded in current base rates is
6 a credit of \$1,652,000, or two times the semi-annual
7 credit of \$826,000. For the annual recovery period,
8 Gulf's requested recovery before true-up is the
9 difference between the jurisdictional projected capacity
10 costs of \$10,120,959 and this embedded credit, or
11 \$11,772,959. The total true-up to be collected in the
12 annual period is the same as that for the semi-annual
13 period, an over-recovery of \$154,779 net of revenue
14 taxes. The total amount to be recovered in the period
15 October 1995 through September 1996, including revenue
16 taxes, is \$11,805,117.

17
18 Q. What is the amount related to purchased power capacity
19 costs that will be included on a residential customer's
20 bill for 1,000 kwh using the annual PPCC factor?

21 A. The purchased power capacity costs recovered through the
22 clause for a residential customer who uses 1,000 kwh
23 will be \$1.68 using an annual cost-recovery factor.
24 This compares to \$2.64 projected for the period October
25 1995 through March 1996, and an estimated \$.91 for the

1 period April 1996 through September 1996, using semi-
2 annual factors.

3

4 Q. When does Gulf propose to collect these new fuel charges
5 and purchased power capacity charges?

6 A. These factors will apply to October 1995 through March
7 1996 billings beginning with Cycle 1 meter readings
8 scheduled on September 28, 1995 and ending with meter
9 readings scheduled on March 28, 1996. If the Commission
10 approves an annual recovery period for the capacity
11 costs, the annual PPCC factors shown on Schedule CCE-4
12 will apply to October 1995 through September 1996
13 billings beginning with Cycle 1 meter readings scheduled
14 on September 28, 1995 and ending with meter readings
15 scheduled on September 26, 1996.

16

17 Q. Ms. Cranmer, does this complete your testimony?

18 A. Yes, it does.

19

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1 GULF POWER COMPANY
2 Before the Florida Public Service Commission
3 Direct Testimony of
4 G. D. Fontaine
5 Docket No. 950001-EI
6 Date of Filing May 19, 1995

7 Q. Please state your name, address and occupation.

8 A. My name is George D. Fontaine, my business address is
9 Post Office Box 1151, Pensacola, Florida 32520, and my
10 position is Performance Test Specialist for Gulf Power
11 Company.

12
13 Q. Please describe your educational and business
14 background.

15 A. I received my Bachelor of Mechanical Engineering Degree
16 from Auburn University in 1980. Following graduation,
17 I joined Gulf Power Company as an Associate Engineer at
18 the Scholz Electric Generating Plant, and as I
19 previously stated, my current position is Performance
20 Test Specialist. I am also a registered Professional
21 Engineer in the State of Florida.

22
23 Q. Mr. Fontaine, have you previously testified in this
24 Docket?

25 A. Yes, sir.

1 Q. Mr. Fontaine, what is the purpose of your testimony in
2 this proceeding?

3 A. The purpose of my testimony is to present GPIF results
4 for Gulf Power Company for the period of October 1,
5 1994, through March 31, 1995.

6
7 Q. Mr. Fontaine, have you prepared an exhibit that
8 contains information to which you will refer in your
9 testimony?

10 A. Yes, Sir, I have prepared an exhibit consisting of five
11 schedules.

12
13 Q. Mr. Fontaine, was this exhibit prepared by you or under
14 your direction and supervision?

15 A. Yes, it was.

16
17 Counsel: We ask that Mr. Fontaine's exhibit be
18 marked for identification as exhibit 25 (GDF-1).

19
20 Q. Mr. Fontaine, before reviewing the GPIF Results for
21 Gulf's units, is there any information which has been
22 supplied to the Commission pertaining to this GPIF
23 period which requires amendment?

24 A. Yes, some corrections need to be made to the actual
25 unit performance data which was submitted monthly to

1 the Commission during this period. These corrections
2 are based on discoveries made during our final review
3 to determine the accuracy of this information prior to
4 this proceeding. The Actual Unit Performance Data
5 tables on pages 14 to 19 of Schedule 5 incorporate
6 these changes. The data contained on these tables is
7 the data upon which the GPIF calculation was made.

8
9 Q. Mr. Fontaine, are there any modifications to the
10 results that need clarification?

11 A. Yes, we have made an adjustment to essentially remove
12 Daniel 1 and Daniel 2 from the heat rate results
13 portion of this GPIF filing. The heat rate targets for
14 these two units were rendered inapplicable to the
15 period due to a significant change in the fuel supply
16 at the Plant for the period. When the targets for this
17 period were established, the two generating units at
18 Plant Daniel were identified as GPIF units.

19 As discussed in the testimony of M. L. Gilchrist,
20 the Company has recently implemented a fuel supply plan
21 for Plant Daniel that includes the seasonal firing of
22 Powder River Basin ("PRB") coal during non-summer
23 months. The seasonal burning of PRB coal at Plant
24 Daniel produces significant fuel cost savings for
25 Gulf's territorial customers. PRB coal was the fuel

1 burned at Plant Daniel during the October 1994 through
2 March 1995 GPIF period.

3
4 Q. Why does the switch to PRB coal during the GPIF results
5 period render the heat rate targets for Daniel 1 and
6 Daniel 2 inapplicable?

7 A. The PRB coal has a substantially lower heat and higher
8 moisture content than what had previously been the year
9 round fuel supply for Plant Daniel. The targets for
10 the period had been based on burning the higher heat
11 and lower moisture content coal that had previously
12 been the normal fuel supply for Plant Daniel. At the
13 time the targets for the period were determined, there
14 was not adequate data to properly derive target
15 equations for both Daniel Units 1 and 2 based on the
16 PRB coal. Because the targets had been based on
17 experience with coal having higher heat and lower
18 moisture content than the coal actually used during the
19 period, the targets themselves became an unattainable
20 standard.

21
22 Q. Should the Company be penalized for failing to meet
23 heat rate targets that had been based on coal with a
24 higher heat and lower moisture content?

25 A. No. As I previously mentioned, a prime driver in the

1 decision to burn PRB coal at Plant Daniel during non-
2 summer months was to save fuel costs for our customers.
3 Assuming that both Daniel Units would have operated on
4 their target equations with the higher heat and lower
5 moisture content fuel, I calculated that burning the
6 PRB coal instead of the higher heat and lower moisture
7 content fuel saved Gulf's territorial customers over
8 \$2 million. Because of the differences inherent to PRB
9 coal, these fuel savings could not have been achieved
10 without the side effect of causing the Daniel units to
11 miss the heat rate targets established based on
12 experience with coal having a higher heat and lower
13 moisture content. Therefore, for the reasons explained
14 above, I have adjusted the heat rate weighting factors
15 for Plant Daniel Units 1 and 2 to zero and left the
16 remaining weighting factor the same.

17
18 Q. Mr. Fontaine, would you now review the Company's
19 equivalent availability results for the period?

20 A. Actual equivalent availability and adjusted actual
21 equivalent availability figures for each of the
22 Company's GPIF units are shown on page 13 of Schedule
23 5. Pages 3 through 8 of Schedule 2 contain the
24 calculations for the adjusted actual equivalent
25 availabilities.

1 A calculation of GPIF availability points based on
2 these availabilities and the targets established by
3 Commission Order PSC-94-1092-FOF-EI is on page 9 of
4 Schedule 2. The results are: Crist 6, +10.00 points;
5 Crist 7, +10.00 points; Smith 1, +10.00 points; Smith
6 2, +10.00 points; Daniel 1, +1.36 points, and Daniel 2,
7 -10.00 points.

8
9 Q. Mr. Fontaine, what were the heat rate results for the
10 period?

11 A. The detailed calculation of the actual average net
12 operating heat rates for the Company's GPIF units is on
13 pages 2 through 7 of Schedule 3. These heat rate
14 figures have not at this point been adjusted in
15 accordance with GPIF procedures for load and other
16 factors to the bases of their targets.

17 As was done for the prior GPIF periods, and as
18 indicated on pages 8 through 13 of Schedule 3, the
19 target setting equations were used to adjust actual
20 results to the target bases. These equations,
21 submitted in June 1994, are shown on page 15 of
22 Schedule 3.

23 As calculated on page 16 of Schedule 3, the
24 adjusted actual average net operating heat rates
25 correspond to GPIF unit heat rate points of: 0.00 for

1 Crist 6, +5.62 for Crist 7; -0.70 for Smith 1, 0.00 for
2 Smith 2. As explained earlier in my testimony, the
3 heat rates for Daniel 1 and Daniel 2 have been excluded
4 from the GPIF results calculation by setting the
5 weighting factors to zero.

6
7 Q. Mr. Fontaine, what number of Company points were
8 achieved during the period, and what reward or penalty
9 is indicated by these points according to the GPIF
10 procedure?

11 A. Using the unit equivalent availability and heat rate
12 points previously mentioned, along with the adjusted
13 weighting factors, the Company points would be +1.18 as
14 indicated on page 2 of Schedule 4. This calculates to
15 a reward in the amount of \$98,968. Because of the
16 adjustments to the heat rate results made necessary due
17 to the change in fuel supply at Plant Daniel, in lieu
18 of the calculated reward, the Company believes that it
19 is appropriate to set the reward/penalty for the period
20 at zero dollars. It is this amount that the Company
21 requests be approved by the Commission in this
22 proceeding.

23
24
25

1 Q. Mr. Fontaine, would you please summarize your
2 testimony?

3 A. Yes, Sir. In view of the adjusted actual equivalent
4 availabilities, as shown on page 9 of Schedule 2, and
5 the adjusted actual average net operating heat rates
6 achieved, as shown on page 16 of Schedule 3, evidencing
7 the Company's performance for the period, Gulf requests
8 a net zero reward/penalty as provided for by the GPIF
9 plan.

10

11 Q. Mr. Fontaine, does this conclude your testimony?

12 A. Yes, Sir.

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GULF POWER COMPANY
Before the Florida Public Service Commission
Direct Testimony of
G. D. Fontaine
Docket No. 950001-EI
Date of Filing June 16, 1995

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Q. Please state your name, address and occupation.

A. My name is George D. Fontaine, my business address is Post Office Box 1151, Pensacola, Florida 32520, and my position is Performance Test Specialist for Gulf Power Company.

Q. Please describe your educational and business background.

A. I received my Bachelor of Mechanical Engineering Degree from Auburn University in 1980. Following graduation, I joined Gulf Power Company as an Associate Engineer at the Scholz Electric Generating Plant, and as I previously stated, my current position is Performance Test Specialist. I am also a registered Professional Engineer in the State of Florida.

Q. Mr. Fontaine, have you previously testified in this Docket?

A. Yes, sir.

1 Q. Mr. Fontaine, what is the purpose of your testimony in
2 this proceeding?

3 A. The purpose of my testimony today is to present GPIF
4 targets for Gulf Power Company for the period of
5 October 1, 1995 through March 31, 1996.
6

7 Q. Mr. Fontaine, have you prepared an exhibit that
8 contains information to which you will refer in your
9 testimony?

10 A. Yes, Sir, I have prepared an exhibit consisting of
11 three schedules.
12

13 Q. Mr. Fontaine, was this exhibit prepared by you or under
14 your direction and supervision?

15 A. Yes, it was.
16

17 Counsel: We ask that Mr. Fontaine's exhibit be
18 marked for identification as exhibit 26 (GDF-2).
19

20 Q. Mr. Fontaine, which units does Gulf propose to include
21 under the GPIF for the subject period?

22 A. We propose that Crist Units 6 and 7, Smith Units 1 and
23 2, and Daniel Units 1 and 2 continue to be the
24 Company's GPIF units.
25

1 Q. Mr. Fontaine, what are the target heat rates Gulf
2 proposes to use in the GPIF for these units for the
3 performance period October 1, 1995 through
4 March 31, 1996?

5 A. I would like to refer you to Page 32 of Schedule 1 of
6 my exhibit where these targets are listed.
7

8 Q. How were these proposed target heat rates determined?

9 A. In every case they were determined according to the
10 GPIF implementation manual procedures for Gulf.

11 Page 2 of Schedule 1 shows the target average net
12 operating heat rate equations for the proposed GPIF
13 units, and Pages 4 through 29 of schedule 1 contain the
14 weekly historical data used for the statistical
15 development of these equations.

16 Pages 30 and 31 of Schedule 1 present the
17 calculations which provide the unit target heat rates
18 from the target equations.
19

20 Q. Were the maximum and minimum attainable heat rates for
21 each proposed GPIF unit, indicated on Page 32 of
22 Schedule 1, calculated according to the appropriate
23 GPIF implementation manual procedures?

24 A. Yes, Sir.
25

1 Q. What are the proposed target, maximum and minimum,
2 equivalent availabilities for Gulf's units?

3 A. The target equivalent availabilities and their ranges
4 are listed on Page 4 of Schedule 2.

5
6 Q. How are these target equivalent availabilities
7 determined?

8 A. The target equivalent availabilities were determined
9 according to the standard GPIF implementation manual
10 procedures for Gulf, and are presented on Page 2 of
11 Schedule 2.

12
13 Q. How were the maximum and minimum attainable equivalent
14 availabilities determined for each unit?

15 A. The maximum and minimum attainable equivalent
16 availabilities, which are presented along with their
17 respective target availabilities on Page 4 of Schedule
18 2, were determined per GPIF manual procedures for Gulf.

19
20 Q. Mr. Fontaine, has Gulf completed the GPIF minimum
21 filing requirements data package?

22 A. Yes, we have completed the required data. Schedule 3
23 of my exhibit contains this information.

24

25

1 Q. Mr. Fontaine, would you please summarize your
2 testimony?

3 A. Yes. Gulf asks that the Commission accept:

4 1. Crist Units 6 and 7, Smith Units 1 and 2 and
5 Daniel Units 1 and 2, for inclusion under the GPIF
6 for the period of October 1, 1995 through
7 March 31, 1996.

8
9 2. The target, maximum attainable, and minimum
10 attainable average net operating heat rates, as
11 proposed by the company and as shown on Page 32 of
12 Schedule 1 and also Page 5 of Schedule 3 of my
13 exhibit.

14
15 3. The target, maximum attainable, and minimum
16 attainable equivalent availabilities, as proposed
17 by the Company and as shown on Page 4 of Schedule
18 2 and also Page 5 of Schedule 3 of my exhibit.

19
20 4. The weekly average net operating heat rate least
21 squares regression equations, shown on Page 2 of
22 Schedule 1 and also Pages 18 through 23 of
23 Schedule 3 of my exhibit, for use in adjusting the
24 six-month actual unit heat rates to target
25 conditions.

1 Q. Mr. Fontaine, does this conclude your testimony?

2 A. Yes, Sir.

3 (Transcript continues in sequence in Volume 2.)
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