

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

 In the Matter of : DOCKET NO. 960001-EI
 :
 Fuel and Purchased Power :
 Cost Recovery Clause and :
 Generating Performance :
 Incentive Factor. :



SECOND DAY - AFTERNOON SESSION

VOLUME 3

Pages 344 through 528

PROCEEDINGS: HEARING

BEFORE: COMMISSIONER J. TERRY DEASON
 COMMISSION JULIA L. JOHNSON
 COMMISSIONER JOE GARCIA

DATE: Thursday, August 29, 1996

TIME: Commenced at 9:30 a.m.
 Concluded at 5:20 p.m.

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

REPORTED BY: JOY KELLY, CSR, RPR
 Chief, Bureau of Reporting
 Official Commission Reporter

APPEARANCES:

(As heretofore noted.)

DOCUMENT NUMBER-DATE

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FPSC-RECORDS/REPORTING

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P R O C E E D I N G S

1
2 **COMMISSIONER DEASON:** Call the hearing back
3 to order. Commissioner Garcia is on his way, will be
4 here any moment, so we'll go ahead and start with the
5 preliminaries.

6 **MR. BEASLEY:** Recall Mr. Ramil for his
7 rebuttal testimony.

8 - - - - -

9 **JOHN B. RAMIL**

10 was called as a rebuttal witness on behalf of Tampa
11 Electric Company and, having been duly sworn,
12 testified as follows:

D I R E C T E X A M I N A T I O N

13
14 **BY MR. BEASLEY:**

15 **Q** Mr. Ramil, did you prepare and cause to be
16 filed a 13-page document entitled "Prepared Rebuttal
17 Testimony of John B. Ramil"?

18 **A** Yes, I did.

19 **Q** If I were to ask you the questions contained
20 in that rebuttal testimony, would your answers be the
21 same?

22 **A** Yes, they would.

23 **MR. BEASLEY:** I'd ask that Mr. Ramil's
24 rebuttal testimony be inserted into the record as
25 though read.

1 **COMMISSIONER DEASON:** Without objection it
2 will be so inserted.
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1 BEFORE THE PUBLIC SERVICE COMMISSION

2 PREPARED REBUTTAL TESTIMONY

3 OF

4 JOHN B. RAMIL

5
6 Q. Please state your name, address, occupation and employer.

7
8 A. My name is John B. Ramil. My business address is 702 North
9 Franklin Street, Tampa, Florida 33602. I am employed by
10 Tampa Electric Company in the position of Vice President -
11 Energy Services and Planning.

12
13 Q. Have you previously filed testimony in this docket?

14
15 A. Yes. I filed direct testimony in this docket on June 24,
16 1996.

17
18 Q. What is the purpose of your rebuttal testimony?

19
20 A. My testimony rebuts certain positions and statements made
21 in the direct testimony of Mr. Hugh Larkin, Jr. for the
22 Office of Public Counsel ("OPC").

23
24 Mr. Larkin recommends that the Commission issue a policy
25 statement that would be not only unnecessary but also

1 wrong. His recommendation that incremental fuel pricing is
2 not appropriate sales other than "economy" transactions and
3 other short-term transactions is based on an irrational
4 distinction between short-term and long-term off-system
5 sales. This approach would deny retail customers the
6 overall benefits that can be derived from longer term
7 transactions. I describe how Mr. Larkin's recommendation
8 incorrectly isolates the consideration of longer term off-
9 system sales transactions in the context of the fuel clause
10 alone and ignores the total economic benefits these
11 transactions provide. I take issue with Mr. Larkin's
12 contention that competition is the only reason incremental
13 fuel pricing might be used in pricing off-system sales.
14 Finally, I show Tampa Electric's ratepayers are receiving
15 benefits today from separated sales priced at incremental
16 fuel prices through lower base rates and increased deferred
17 revenues.

18
19 Q. Is it necessary for the Commission to issue a policy
20 regarding the effect of certain wholesale sales on retail
21 fuel cost recovery for Tampa Electric Company?

22
23 A. No. In the fuel hearing held in August of 1987, the
24 Commission reviewed and approved the use of spot coal
25 prices for fuel pricing of off-system sales. In the final

1 order from that fuel hearing, Order No. 18136 for Docket
2 Nos. 870001-EI, 870002-EI and 870003-EI, the Commission
3 recognized the appropriateness of spot coal as the price
4 basis for economic dispatch of units and as the price basis
5 for avoided cost payments to cogenerators for both Florida
6 Power Corporation (FPC) and Tampa Electric. Additionally,
7 the Commission approved the concept of spot coal pricing
8 for both short-term off-system sales and for the remaining
9 term of the unit sale to Florida Power & Light from Big
10 Bend Unit 4. The considerations which warranted the
11 Commission's approval of the use of incremental fuel
12 pricing of unit power sales in the 1987 proceeding remain
13 valid today. Tampa Electric has made new sales priced on
14 this basis ever since and has credited the retail fuel
15 clause accordingly in each biannual fuel hearing. These
16 practices were thoroughly reviewed in connection with all
17 of Tampa Electric's off-system sales transactions in Tampa
18 Electric's 1992 rate case. At that time, the Commission
19 did not change the fuel pricing and treatment of long-term
20 sales.

21
22 Q. Do you agree with Mr. Larkin's assertions regarding the
23 type of sales for which incremental pricing is appropriate?
24

25 A. Yes, in part and no, in part. I agree with Mr. Larkin's

1 assertion that incremental fuel pricing is appropriate for
2 "economy" and other short-term transactions. As Mr. Larkin
3 recognizes, ratepayers of both the selling utility and the
4 purchasing utility realize benefits through the sharing of
5 resources. However, Mr. Larkin has created an artificial
6 distinction between the sale of electricity on a short-term
7 or daily basis and longer term off-system sales which are
8 separated for rate making purposes. Longer term off-system
9 sales are also beneficial to the system. Therefore, no
10 artificial limitation should be adopted as policy which
11 would hinder the use of incremental fuel pricing for one
12 type of beneficial transaction, (i.e. long-term off-system
13 sales), but not for another.

14
15 Q. Mr. Larkin states that a longer term off-system sale cannot
16 be an economy transaction. Do you agree with his
17 assertion?

18
19 A. No, I do not. On page 5, line 6 through 8, Mr. Larkin has
20 added qualifiers to the concept of "economy transaction"
21 which are erroneous and irrelevant. The term of an off-
22 system sale of capacity and energy is irrelevant as long as
23 that transaction provides an economic benefit over that
24 term. Further, economy broker transactions often occur
25 during on-peak hours so, clearly, Mr. Larkin's qualifier

1 that economy transactions can occur only during off-peak
2 hours is in error. All off-system sales should be judged
3 on their total economic benefits which are dependent on
4 system economics and the specifics of each transaction. A
5 policy which would arbitrarily require different fuel
6 pricing and treatment of off-system transactions based on
7 the term of the contract or Mr. Larkin's other qualifiers
8 would be wrong and could result in loss of potential
9 benefits provided by longer term transactions.

10
11 Q. Is it appropriate for Mr. Larkin to characterize the sale
12 of capacity and energy from a unit at a fuel price below
13 average fuel cost as a "subsidized" sale?

14
15 A. No, it is not. Mr. Larkin has made several errors in his
16 characterization. First, he implicitly assumes that
17 pricing fuel based on average cost guarantees that there
18 will not be an adverse effect on the retail fuel adjustment
19 clause. Every customer's transaction, whether retail or
20 wholesale, affects the fuel adjustment clause differently
21 based on their usage characteristics compared with the
22 system generation curve. For example, FPC purchases 50
23 MW's from Tampa Electric on Tampa Electric's All-
24 Requirements ("AR-1") wholesale tariff. The fuel pricing
25 and fuel clause separation for this AR-1 sale is based on

1 system average fuel costs. However, since FPC uses this
2 purchase as an intermediate purchased power resource, it
3 takes energy primarily at times on, or near, Tampa
4 Electric's system peak. Since incremental fuel costs at
5 these times are generally greater than the system average
6 fuel revenues collected from Florida Power Corporation,
7 this sale would be considered "subsidized" or "non economic"
8 by Mr. Larkin. Mr. Larkin's concerns are with long-term
9 sales priced at less than average fuel costs. Here is an
10 example where a sale is priced at system average but by Mr.
11 Larkin's fuel clause only criteria, this sale is non-
12 economic. The point is that Tampa Electric follows the
13 correct methodology for all of its sales. Credits to the
14 fuel clause should be accounted for on a consistent basis
15 and should reflect only the actual fuel revenues received
16 from off-system sales.

17
18 This leads to the second error in Mr. Larkin's
19 characterization which involves measuring the value of an
20 off-system sale based only its impact on the fuel clause.
21 Continuing with the FPC example above, Tampa Electric
22 receives significant capacity and non-fuel energy revenues
23 from the sale of system capacity under the AR-1 tariff.
24 These additional revenues, taken into consideration along
25 with the impact of the sale on system average fuel cost,

1 make the transaction beneficial to retail ratepayers and
2 Tampa Electric's system as a whole. In fact, Tampa
3 Electric's retail customers are currently enjoying the
4 benefits of the FPC sale through lower base rates because
5 that sale was part of the separation of rate base and
6 expenses to the wholesale jurisdiction that reduced retail
7 revenue requirements in Tampa Electric's last base rate
8 case in 1992.

9
10 Q. Mr. Larkin asserts that the presence of competition drives
11 the need for incremental fuel pricing in off-system sales
12 of capacity and energy. Do you agree?

13
14 A. Yes, in part. Undoubtedly, competition is shaping the
15 wholesale power market. However, Mr. Larkin's scenario of
16 two local utilities competing to serve a third utility is
17 outdated. There are many more competitors in the wholesale
18 market today and they are aggressively marketing power to
19 utilities in Florida, frequently basing their pricing on
20 incremental fuel costs.

21
22 Nevertheless, where I particularly disagree with Mr. Larkin
23 is his assertion that only competition drives the need for
24 incremental fuel cost pricing. For instance, just as the
25 Commission approved spot coal pricing for economic dispatch

1 of Tampa Electric's generation resources in 1987,
2 purchasing utilities can require spot coal pricing to
3 increase the dispatchability of their purchased capacity
4 resources. Additionally, many purchasing utilities are
5 willing to assume greater risk by purchasing energy based
6 on spot coal prices on the prospect that if spot coal
7 prices stay low, the sale will dispatch more. Should coal
8 markets change and spot prices exceed the average price of
9 coal, such wholesale customers risk having to pay fuel
10 prices above average. This fuel revenue would then be
11 credited to the retail fuel adjustment clause and thereby
12 lower the retail average fuel cost. I doubt OPC or Mr.
13 Larkin would recommend that average fuel cost be credited
14 back to the retail fuel adjustment clause in this scenario.

15
16 Q. Mr. Larkin questions the designation of a wholesale
17 customer as an incremental transaction. What are your
18 thoughts regarding his position?

19
20 A. Mr. Larkin states that the designation of a new customer as
21 an incremental customer is not justified from an economic
22 standpoint. This is incorrect in the case of off-system
23 sales. Providing capacity and energy to wholesale
24 customers, in contrast to retail customers, is not a legal
25 obligation of Tampa Electric. Whether or not wholesale

1 transactions should be made depends upon on whether or not
2 the overall effect is beneficial. Therefore, the
3 designation as incremental is appropriate.

4
5 As a incremental customer, the use of spot coal pricing for
6 the determination of incremental costs is appropriate.
7 Tampa Electric purchases less coal under long-term contract
8 minimums than is required by the generation needs of its
9 retail customers alone. To the extent that Tampa Electric
10 elects to serve one of these discretionary wholesale
11 customers from a coal-fired unit, the appropriate fuel
12 pricing for that sale is spot coal. This appropriately
13 represents the incremental costs of making the sale and
14 does not represent a price "concession" as Mr. Larkin states
15 in his testimony.

16
17 Q. Mr. Larkin disagrees with your testimony that retail
18 ratepayers benefit from wholesale sales through the
19 contribution to fixed costs. Please describe why Mr.
20 Larkin's disagreement with your testimony is incorrect.

21
22 A. It is indisputable that Tampa Electric's ratepayers are
23 currently enjoying the benefits of Tampa Electric's
24 participation in the wholesale bulk power market. For
25 example, the jurisdictional revenue requirement used to set

1 Tampa Electric's retail base rates is approximately \$9.0
2 million lower than it otherwise would have been if rate
3 base and expenses were not separated from the retail
4 jurisdiction to reflect transactions with incremental fuel
5 pricing. Comparing this \$9.0 million dollar annual revenue
6 requirement reduction to the estimated \$1.1 million fuel
7 clause impact in 1995 clearly shows that retail ratepayers
8 are currently enjoying the positive benefits of this type
9 of transaction year after year. In fact, retail ratepayers
10 are enjoying approximately eight times as much positive
11 benefit as they are absorbing negative fuel impact.

12
13 While it is true that retail rates do not change
14 instantaneously with the addition, or loss of a separated
15 sale, these sales nevertheless should not be discouraged
16 through an arbitrary regulatory treatment as proposed by
17 Mr. Larkin. Each of these sales contributes revenues to
18 cover fixed costs which would otherwise be placed on retail
19 customers.

20
21 In addition, as I stated in my direct testimony in this
22 proceeding, Tampa Electric is currently operating under a
23 regulatory treatment where the benefits to our customers
24 from incremental off-system sales are even more immediate
25 and direct than is normally the case. First, the

1 separation of rate base and expenses for surveillance
2 report purposes is adjusted monthly according to the
3 current level of actual MW and MWH of separated sales
4 compared to the level included in the last projected test
5 year under which current base rates were set. Thus, when
6 an additional sale is made, additional rate base and
7 expenses are carved out of the retail jurisdiction raising
8 the reported return on equity. Next, owing to the deferred
9 revenue plan that the company, the Office of Public Counsel
10 and the Florida Industrial Power Users Group agreed to, and
11 which the Commission approved first for 1995 and then for
12 the period 1996 - 1998, this increased return on equity
13 results in increased deferred revenues and potential
14 refunds.

15
16 Q. Is Mr. Larkin correct that the contribution to fixed cost
17 derived from separated off-system sales flows directly to
18 shareholders?

19
20 A. No, he is not. Beyond the impact on return on equity,
21 Tampa Electric's current deferred revenue plans for the
22 years 1995 and 1996 through 1998 are providing timely
23 benefits to the retail ratepayers. For example, Tampa
24 Electric deferred approximately \$50 million in revenue from
25 1995 based on the deferred revenue plan approved on May 20,

1 1995. Had Tampa Electric's rate base and expenses
2 associated with all separated wholesale sales not been
3 separated in 1995, those deferred revenues would have been
4 reduced by approximately \$29 million.

5
6 Q. Do you agree with Mr. Larkin that all utilities will adopt
7 the procedure of pricing off-system sales at incremental
8 fuel costs?

9
10 A. No, I do not agree. First, Tampa Electric received
11 approval for incremental fuel cost pricing of unit sales in
12 the 1987 fuel hearing. This approval may not apply to
13 other utilities.

14 Second, the economics of other utilities may not make this
15 option beneficial. I believe there are differences between
16 Tampa Electric's generation resources and those of the
17 other utilities in the state. Because of these
18 differences, the other utilities may not be able to price
19 fuel at their incremental cost and be able to make sales
20 which are both attractive in the market place and
21 beneficial to their retail customers. Therefore, it is
22 possible that other utilities in the state may not be in
23 the position to make off-system sales proposals similar to
24 those offered by Tampa Electric.

25

1 Q. What should be the Commission's expectation with respect to
2 such sales by other utilities?

3
4 A. To the extent incremental fuel cost pricing can be used by
5 other utilities to make off-system sales that might not
6 otherwise be made and such sales are beneficial to the
7 retail customers, they should be encouraged to make this
8 type of transaction. By maximizing the use and the
9 efficiency of generation resources, these companies and
10 their ratepayers will benefit in the end. There is no
11 rational reason for the Commission to issue a policy which
12 will discourage utilities from executing off-system sales
13 agreements that provide total economic benefits to their
14 customers and their system. Such a policy would not only
15 harm the selling utility's retail customers, but it would
16 also disadvantage the purchasing utility's customers since
17 they would be denied the benefits of an economic purchase.

18
19 Q. Does this conclude your testimony?

20
21 A. Yes it does.
22
23
24
25

1 Q (By Mr. Beasley) Would you please
2 summarise your rebuttal testimony, Mr. Ramil?

3 A Good afternoon, Commissioners. In the
4 effort of being brief let me make a few points in the
5 summary of my testimony.

6 The bottom line of my rebuttal testimony in
7 response to Mr. Larkin is that the rates today reflect
8 significant nonfuel benefits associated with the 1992
9 rate case, and the sales that were made at that time
10 and our current portfolio of sales, which use
11 incremental fuel cost pricing. Any other scenarios
12 created or "what ifs" created are purely speculation.

13 The existing procedures that are in place
14 for prudence that parties participate before this
15 Commission are adequate to address issues with respect
16 to increased fuel cost to customers.

17 I'm still in my rebuttal testimony mystified
18 by Mr. Larkin's insistence in not recognizing total
19 economic benefits. And it's become clear that the --
20 that the reason for this is an unreal model of the
21 wholesale environment, and the assumption that it is a
22 "utility must serve-customer must buy" market. It is
23 not. These wholesale sales by utilities today are
24 discretionary, and you need to look at them from the
25 standpoint of net benefits to customers.

1 To make propositions that would suggest that
2 the company absorb costs in making these discretionary
3 sales, it's not an incentive to pursue those costs for
4 the benefit of the retail customers, as has been
5 demonstrated by the displays I had up earlier which
6 showed benefits to Tampa Electric's customers.

7 With all of these things in mind and the
8 other things pointed out in my rebuttal testimony, I
9 urge you, Commissioners, to reject any new proposals;
10 that you develop a policy that would require more of a
11 characterization as to whether wholesale sales are
12 good, bad or need to be reviewed than what you have
13 been using up to this point, and that is a total
14 economics net benefit test. And that you use the
15 existing forums that you have for examining any issues
16 that come up with respect to those sales. Thank you.

17 MR. BEASLEY: We submit Mr. Ramil for cross
18 examination.

19 COMMISSIONER DEASON: Mr. Stone.

20 MR. STONE: No questions.

21 COMMISSIONER DEASON: Mr. McGee.

22 MR. MCGEE: No questions.

23 COMMISSIONER DEASON: Mr. Howe.

24 MR. HOWE: No questions.

25 MS. KAUFMAN: No questions.

1 COMMISSIONER DEASON: Staff.

2 MS. JOHNSON: No questions.

3 COMMISSIONER DEASON: I assume that's no
4 redirect. Thank you, Mr. Ramil. That concludes all
5 witnesses on Issue 9.

6 It is the Commission's intent not to take up
7 Issue 9 with a bench decision today. There are no
8 fallout issues which are contingent upon this issue.
9 Therefore, it's not necessary to have a bench decision
10 today.

11 We contemplate Staff filing a
12 recommendation. Perhaps it will be done in
13 conjunction with some future agenda conference but
14 that can be all worked out.

15 We can now proceed to the Florida Power and
16 Light issues. Mr. Childs.

17 COMMISSIONER GARCIA: Commissioner, I would
18 assume that's with the intention of the companies
19 filing briefs and the whole --

20 COMMISSIONER DEASON: We had not
21 contemplated filing briefs, but if you desire briefs
22 and if Staff thinks it would be helpful, it's
23 certainly something we can contemplate.

24 COMMISSIONER GARCIA: I certainly would on
25 this issue. If Staff has a problem with it I'd like

1 to hear it, but --

2 MS. JOHNSON: We are inclined to agree.

3 COMMISSIONER GARCIA: Thank you.

4 COMMISSIONER DEASON: Very well. Staff just
5 get with the Prehearing Officer and we'll set out a
6 procedural schedule and we'll give notice to all the
7 parties as to when the briefs are due. I understand
8 there is no time constraint or urgency to have this
9 issue decided within a specified period of time. Is
10 that correct?

11 MS. JOHNSON: That's correct.

12 MR. STONE: Commissioner Deason, if I may, I
13 have no further involvement in this proceeding. I was
14 here for Issue 9. May I be excused?

15 COMMISSIONER DEASON: You certainly may.
16 You, too, Mr. McGee, and anyone else that wants to be
17 excused.

18 MR. BEASLEY: We would like to as well.

19 COMMISSIONER DEASON: Mr. Childs, you have
20 been waiting all this time and now everybody is
21 leaving.

22 MR. CHILDS: I know. They are not very
23 friendly, are they?

24 Commissioner, we're moving to Issue 11a and
25 I'd like to call Mr. Wade to the stand.

1 **COMMISSIONER DEASON:** Has Mr. Wade been
2 sworn?

3 **MR. CHILDS:** He has.

4 - - - - -

5 **ROBERT L. WADE**

6 was called as a witness on behalf of Florida Power &
7 Light Company and, having been duly sworn, testified
8 as follows:

9 **DIRECT EXAMINATION**

10 **BY MR. CHILDS:**

11 **Q** Mr. Wade, would you state your full name and
12 address, please?

13 **A** My name is Robert L. Wade. My business
14 address is 700 Universe Boulevard, Juno Beach, Florida
15 33408.

16 **Q** By whom are you employed and in what
17 capacity?

18 **A** I'm employed by Florida Power and Light
19 Company as Director of Business Service also within
20 the Nuclear Business Unit.

21 **Q** Do you have before you a document entitled
22 "Supplemental Testimony of R.L. Wade, Docket 960001-EI
23 dated July 26th, 1996"?

24 **A** Yes, I do.

25 **Q** Was that prepared by you as your testimony

1 for this proceeding?

2 A Yes, it was.

3 Q Do you have any changes or corrections to
4 make to it?

5 A No, I do not.

6 Q Do you adopt this as your testimony?

7 A Yes, I do.

8 Q Do you have any changes or corrections to
9 make to the documents that you are sponsoring in this
10 proceeding?

11 A No, I do not.

12 MR. CHILDS: Commissioner, I would ask that
13 the prepared supplemental testimony of Mr. Wade be
14 inserted into the record as though read.

15 COMMISSIONER DEASON: Without objection, it
16 will be so inserted.

17 MR. CHILDS: I believe that the documents he
18 is sponsoring have been identified as Exhibits 12 and
19 13.

20 COMMISSIONER DEASON: That is correct.
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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

SUPPLEMENTAL TESTIMONY OF R. L. WADE

DOCKET NO. 960001-EI

July 26, 1996

1 Q Please state your name and address.

2 A. My name is Robert L. Wade. My business address is 700 Universe
3 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 (FPL) as Director,
7 Business Services in the Nuclear Business Unit.

8

9 Q. Have you previously provided testimony in Docket No. 960001-EI?

10 A. Yes.

11

12 Q. What is the purpose of your supplemental testimony?

13 A. The purpose of my testimony is to discuss outages at St. Lucie Units
14 1 and 2 during the period September 1994 through September 1995.

1 Q. Have you prepared or caused to be prepared under your
2 supervision, direction and control an Exhibit in this proceeding?

3 A. Yes, I have. It is labelled Document No. 1.
4

5 Q. Were the outages at St. Lucie Units 1 and 2 during the period
6 September 1994 through September 1995 an issue during the
7 February 1996 Fuel proceeding?

8 A. Yes. The issue; "Should FPL recover replacement energy costs
9 resulting from outages at the St. Lucie Plant during the period
10 September 1994 through September 1995", was raised by the
11 Commission Staff during the February 1996 Fuel proceeding. The
12 issue was deferred from the February 1996 hearing to allow time for
13 additional discovery.
14

15 Q. Has FPL filed any discovery responses with the Commission
16 concerning this issue?

17 A. Yes. On November 3, 1995, FPL filed responses to Staff's Third Set
18 of Interrogatories which I co-sponsored with Mr. Silva. These
19 interrogatory responses provide a detailed description of the incidents
20 which occurred from September 1994 through September 1995 at the
21 St. Lucie plant that affected the operation of the units and the

1 corrective actions taken by FPL.

2

3 **Q. Has FPL updated these discovery responses?**

4 A. Yes. Recently the Commission Staff asked additional questions and
5 requested updates on the interrogatory responses. Attached as my
6 Document No. 1 is FPL's revised response to Interrogatory No. 21,
7 which provides a detailed description of the incidents which occurred
8 from September 1994 through September 1995 at the St. Lucie plant
9 that affected the operation of the units and the corrective actions taken
10 by FPL.

11

12 **Q. In your response to Interrogatory No.21, page 6 of 18, the offline**
13 **hours for July 10, 1995 are noted as 29.45 and in response to**
14 **Interrogatory No. 19, Page 7, 34.2 offline hours are noted for July**
15 **10, 1995. Why is there a difference?**

16 A. The offline hours originally reported in response to Interrogatory No.
17 21 excluded normal plant start up hours. Interrogatory No. 21 has
18 been revised to reflect the total offline hours by event.

19

20

21 **Q. Should FPL be allowed to recover the replacement fuel cost**

1 associated with the outages at the St. Lucie Plant?

2 A. Yes. FPL believes its actions regarding the outages at the St. Lucie
3 Plant were reasonable and prudent and, therefore, FPL should recover
4 all replacement energy costs. FPL followed proven management
5 practices and operating procedures, and exercised reasonable diligence
6 in operating the plant. The St. Lucie nuclear units were taken off line
7 on August 1, 1995 due to Hurricane Erin. After the threat of the
8 Hurricane passed, FPL began the normal process of performing
9 various inspections before returning both units to service. Unit 2 was
10 successfully returned to service on August 5, 1995. During the
11 inspections of Unit 1 prior to bringing the unit to full power, FPL
12 observed problems with equipment and procedures which required
13 correction prior to returning the unit to service. This identification of
14 problems prior to bringing the unit back into service is part of FPL's
15 normal operating procedure and is, in fact, a prudent means of
16 correcting problems before equipment fails, possibly resulting in even
17 greater downtime.

18
19 FPL's nuclear management made an extensive review of the events
20 that affected the operation of the St. Lucie Plant and, where
21 appropriate, took corrective actions to address any operational

1 problems identified. These corrective actions included expanded
2 personnel training and procedure enhancements to address
3 unanticipated events. The review of the events and the corrective
4 actions are provided in detail in my Document No. 1, pages 3 through
5 18.

6
7 When reviewing the incidents that affected the operation of the St.
8 Lucie Plant during a three month time period (July, August and
9 September 1995), it is also important to review how FPL's nuclear
10 units have performed over the years and how their performance
11 compares to the industry. Since 1991, all four FPL's nuclear units
12 have consistently performed above the nuclear industry average for
13 forced (unplanned) outages. For example, while the industry average
14 for forced outages in 1994 was approximately 10.6%, FPL's nuclear
15 units had forced outage rates of less than 4% in 1994. The industry
16 average for forced outages in 1995 is not yet available. FPL's 1995
17 average nuclear forced outage rate was 6.6%. Other significant gains
18 in nuclear unit availability were achieved through the reduction in the
19 length of planned outages. Between 1992 and 1994 the average
20 number of days off line for planned outages at FPL's nuclear sites has
21 decreased from more than 63 days to less than 44 days. In contrast,

1 the nuclear industry average for planned outages was approximately
2 65 days in 1992 and 56 days in 1994. This performance has provided
3 substantial savings to our customers in reduced fuel costs. Therefore,
4 FPL believes it would be patently unfair to focus on events occurring
5 during a small subperiod to determine allowance of fuel replacement
6 cost recovery.

7

8 **Q. Does this conclude your supplemental testimony?**

9 **A. Yes, it does.**

10

11

12

1 Q (By Mr. Childs) Would you please summarize
2 your testimony?

3 A Yes, very briefly.

4 The purpose of my testimony here today is to
5 provide insight to this Commission on the outages of
6 his St. Lucie Units 1 and 2 during the period
7 September 1994 through September 1995.

8 In addressing these outages I've included my
9 Document 1, including revised Interrogatory No. 21,
10 which provides details as to the cause of the outages
11 and FPL's actions. These details show that FPL acted
12 appropriately and within the framework of procedures
13 that had proven effective in over 20 years of
14 St. Lucie operations as an industry leader. The
15 replacement power costs were not due to imprudent
16 actions by FPL.

17 Q Does that conclude your summary?

18 A Yes, it does.

19 MR. CHILDS: We tender Mr. Wade for cross
20 examination.

21 COMMISSIONER DEASON: Mr. Howe.

22 MR. HOWE: No questions.

23 COMMISSIONER DEASON: Ms. Kaufman.

24 MS. KAUFMAN: No questions.

25 COMMISSIONER DEASON: Staff.

CROSS EXAMINATION

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BY MS. JOHNSON:

Q Good afternoon, Mr. Wade. Can you please turn to your Document 1, which is Exhibit RLW-2, Page 1 of 18.

A 1 of 18.

Q Yes.

A Okay. I'm there.

Q You state that FPL should recover all replacement energy costs relating to the outages which are listed on Pages 1 and 2 of this document because its actions were reasonable and prudent, correct?

A Yes.

Q Also at Page 4 of your testimony you state that Florida Power and Light's nuclear management made extensive review of the events that affected the operation of St. Lucie, and where appropriate, took corrective actions to address any operational problems identified.

A Yes.

Q And these corrective actions included expanded personnel training and procedure enhancement to address unanticipated events, correct?

A Yes. We go through a continuous self-assessment process that at any time we have an

1 event, as we have from the time of initial
2 construction, to determine what is the reason for
3 those events and see if we can provide opportunities
4 for improvement.

5 Q Wasn't a concern also raised concerning
6 contractor oversight?

7 A Yes.

8 Q Does Florida Power and Light have any
9 procedures and policies concerning who should perform
10 root cause analysis, what format is to be used,
11 qualifications and training required -- and the
12 qualifications and training required if an equipment
13 problem has been identified?

14 A Yes, we do have a number of procedures in
15 those areas. Some of them are departmental specific;
16 some of them are at a higher level and cover the whole
17 division, but we do have a number of procedures in
18 place for that, and we have ongoing training of our
19 employees in those areas.

20 Q Is one of those programs the St. Lucie
21 Action Report, which is called "Star Program"?

22 A The St. Lucie Action Report Program of what
23 you referred to is one component of that at the time
24 under review here. That component is no longer in
25 existence.

1 Q I'd like for you to turn to Page 12 of 18 of
2 the same Document 1.

3 A Okay.

4 Q And this page addresses the event that's
5 described as pressurizer code safety valve flange
6 leakage, correct?

7 A Yes.

8 Q The leakage of this valve was described as
9 the cause of the outage on September 11, 1995,
10 correct?

11 A Yes.

12 Q Had any leakage been identified near or
13 around this valve prior to September 11, 1995?

14 A I think the leakage was identified a couple
15 days earlier. And the work associated with that point
16 of time up to here was actually covered by the
17 preceding event, which is identified on Page 11.

18 These events in some cases -- if I can just
19 make clarification -- overlapped, so that when I'm
20 describing a period of time for the first event, I may
21 have started work on the next event.

22 Q So that I'm following you, you said that the
23 problems were identified a couple of days later?

24 A A couple of days before, I believe, is what
25 I said.

1 Q Before. Excuse me. Is that the time frame
2 of September the 1st that you're referring to?

3 A Yes, around that time frame.

4 Q Had any problems with the pressurizer safety
5 valve been noticed prior to September 1, 1995?

6 A Well, these particular valves routinely
7 undergo maintenance during refueling outages. In
8 fact, we go through each outage and remove the valves
9 and do work to bring them back up to standard. We've
10 had gasket leaks in the past. Gaskets leaks are not
11 an abnormal occurrence, and we have had to deal with
12 gasket leaks.

13 So in answer to your question, this is a
14 routine maintenance type item for us.

15 Q Are you familiar with a report that was done
16 by the NRC, Nuclear Regulatory Commission, regarding
17 the outages at St. Lucie?

18 A There were a couple of reports. If you're
19 referring to the one that was submitted as one of the
20 documents, yes, I am familiar with it.

21 Q And in that report it indicated that
22 problems with the pressurizer safety valve were
23 noticed on August 3rd, 1995; is that correct? Or
24 would you comment?

25 A I do not recollect that particular sentence.

1 I'd have to look for it.

2 MR. CHILDS: Could we have, if you have it,
3 a reference to where that is?

4 MS. JOHNSON: Yes. I'll refer you to
5 Page 17 of 49, and this is Staff's Second Request for
6 Production of Documents No. 5.

7 WITNESS WADE: Okay. I'm there.

8 Q

9 MS. JOHNSON: The fifth paragraph.

10 A Let me tell you what I see here and you tell
11 me if I'm reading it wrong. I'm reading now from the
12 fifth paragraph, the first sentence. It says "The
13 unit again attempted a restart during the week of
14 September 10th." And then it goes on to describe the
15 leakage that we were talking about in the earlier
16 event. So I see a date here of September 10th.

17 Q If you will continue reading on towards the
18 end of the paragraph?

19 A Okay.

20 A It does say here that this deficiency -- I'm
21 not sure what exactly they are referring to -- had
22 been identified on August 3rd.

23 Q So is it your testimony that you're not sure
24 if this deficiency is related to the valve in
25 question?

1 A It's not that I'm not sure it's related to
2 the valve in question, it's that I'm not sure it's the
3 same exact leak that I described on September 11th
4 where we actually went in to work. It's not clear to
5 me what they meant here by "deficiency", although they
6 are talking about the same valve. I can only surmise
7 that it was associated in some way with that valve.

8 Q Well, it indicates there was an evaluation
9 done by the Company. Are you familiar with that
10 evaluation?

11 A No, I am not.

12 Q Has anyone -- does anyone who has filed
13 testimony in this docket have any information
14 concerning that?

15 A The only evaluation I'm aware of with this
16 particular instance is the one that is described in my
17 testimony, on the page we referenced earlier, and that
18 is a detailed evaluation of this event.

19 Q If a deficiency was identified on August
20 3rd, do you know why the problem was not corrected at
21 that point in time?

22 A Well, it doesn't say that it wasn't
23 corrected here. So I'm not sure, one, what the
24 deficiency was that they identified for sure, or that
25 it wasn't corrected. It simply says it wasn't

1 adequately evaluated.

2 Q It said that it was not adequately evaluated
3 to determine the need for rework prior to plant
4 restart.

5 Did Florida Power and Light identify root
6 cause for this particular problem?

7 A Yes, it did, and it did fix the problem that
8 is described in my testimony.

9 Q I'll refer you back to Interrogatory 21,
10 Page 12 of 18.

11 A Okay. I'm there.

12 Q In the fourth paragraph, the first line,
13 indicates that "The cause of and corrective actions
14 for PCSV leakage has been an issue in the nuclear
15 industry as well with FPL for some time."

16 My question is if that is, in fact, the
17 case, when a deficiency was noted on August 3rd, did
18 that alert anyone of the need to determine what was
19 causing the deficiency?

20 A As we identified deficiency, because I don't
21 know what specific deficiency they are talking
22 about -- I'm aware of this particular deficiency on
23 Page 12 and that we corrected it. In fact, we did
24 successfully restart. But in general, as we define a
25 deficiency we do do an evaluation and we do determine

1 whether or not we can continue to operate with or
2 without that deficiency. When the Nuclear Regulatory
3 Commission comes in in hindsight they apply an
4 extraordinary standard to our activities because they
5 are looking at it from the standpoint of its
6 relationship and impact on radiation safety.

7 So in doing that, and in the way they look
8 at things and in the way we look at things from a
9 operation standpoint are different. We meet the
10 radiation standard from their standpoint, but from a
11 maintenance type activity, we may or may not chose to
12 do a particular piece of work at a given time.

13 Q Okay. Mr. Wade, I'm going to refer you back
14 to PLD-5 on Page 17, and I would ask that you read
15 into the record the entire paragraph.

16 MR. CHILDS: Is this the same paragraph to
17 which you directed his attention earlier, it starts
18 with the words "The unit again?"

19 MS. JOHNSON: That's correct.

20 A "The unit again attempted a restart during
21 the week of September 10th. After achieving 532
22 degrees Fahrenheit and approximately 1700 psia, a leak
23 at the flange of the pressurizer safety valve, 1201,
24 resulted in returning the plant to cold shutdown to
25 repair this item. A review by the licensee found this

1 deficiency had been identified on August 3rd but had
2 not been adequately evaluated to determine the need
3 for rework prior to plant restart. As a result of
4 this, the unit was still shut down at the end of the
5 inspection period. This item is identified as a
6 weakness in the work screening and planning process."

7 Q Mr. Wade, isn't it true that as a result of
8 the flange leakage, the company -- St. Lucie 1 was off
9 line for a total of 173 hours, and that the Company
10 incurred replacement energy cost of \$2 million, and
11 the cost to repair the valve was \$190,000?

12 A That's correct.

13 Q Can you turn to Page 5 of 18 of your
14 Interrogatory 21.

15 A Yes.

16 Q The event described on this page is the
17 turbine trip during surveillance testing, correct?

18 A Yes, it is.

19 Q The response on Page 5 of 18 indicates that
20 the cause of this event was the performance of
21 surveillance test steps out of sequence, correct?

22 A Yes.

23 Q Specifically the response states that an
24 operator failed to close an isolation valve prior to
25 continuing with the test, correct?

1 A Yes.

2 Q And isn't it correct that the procedures for
3 performing the test specify that this must be done
4 first?

5 A Yes. There was written procedures on this.
6 The procedures were available to the employee and the
7 procedures were correct.

8 Q Was there any management oversight over this
9 procedure?

10 A Yes. The procedures go through -- all of
11 our procedures do, and we have thousands of them at a
12 nuclear plant as you might imagine -- go through a
13 process of being written, independently reviewed, and
14 then go through a safety review.

15 Q But when the procedure was being performed
16 on July 8th, was there oversight by management at that
17 time?

18 A Yes. The individual -- if I can just
19 clarify a little bit -- was in the field, if you will,
20 outside performing those tests, and he was in radio
21 communication with supervision in the control room
22 watching as he went through the various steps.

23 Q In the Company's response to Interrogatory
24 21 indicates that this event resulted in replacement
25 and energy cost of \$615,742, correct?

1 A Yes, that's correct.

2 Q Can you turn to the next page, which is
3 Page 6 of 18 of RLW-2, Document 1?

4 A Yes, I'm there.

5 Q This event is described as external event,
6 vehicle in a discharge canal, correct?

7 A Yes, it is.

8 Q Specifically the interrogatory states that a
9 vehicle entered FPL property through an open gate off
10 Highway A1A, correct?

11 A Yes.

12 Q The response also indicates that the vehicle
13 fell into the discharge canal after entering a gate
14 that was routinely left unlocked, correct?

15 A Right. This particular situation was on FPL
16 property outside the power plant area. In other
17 words, the power plant is on the west side of this
18 Highway A1A; this particular property is on the east
19 side or Atlantic Ocean side. And this gate during
20 normal business hours, to afford our employees that
21 need to be in that area which are doing environmental
22 testing and maintenance on the canals, easy ingress
23 and egress to this area just as you would have as a
24 normal business practice.

25 Q Is the purpose of the gate to prevent

1 access, public access to FPL property, which is in and
2 around of the St. Lucie discharge canal?

3 A It's one of the barriers to having
4 unauthorized people, if you will, enter the discharge
5 canal. There are other barriers in place.

6 Q And Highway A1A is fairly busy roadway; is
7 that correct?

8 A It's a two-lane highway on a barrier island.
9 I wouldn't know how to characterize the busyness of
10 it. Certainly not as busy as Capital Drive here that
11 I drove today, Capital Circle.

12 Q And it's also known as US 1, Highway US 1?

13 A No, it is not. Highway US 1 is a four-lane
14 highway that's approximately five miles to the west.

15 Q But Highway A1A is not located in what could
16 be described as a remote area?

17 A This particular section is fairly remote.
18 There are not other things around it. There are not
19 houses around there. There's limited public beach
20 access there.

21 COMMISSIONER GARCIA: If this is any help,
22 Counsel, I have been lost on that highway and is
23 fairly remote from one point or another when I found
24 the plant by mistake.

25 MS. JOHNSON: Thank you.

1 COMMISSIONER DEASON: That wasn't your
2 vehicle in the discharge canal? (Laughter)

3 COMMISSIONER GARCIA: No comment.

4 A We've only had this occasion once, so I'm
5 sure it wasn't the Commissioner's vehicle.

6 Q (By Ms. Johnson) Getting back to Page 6 of 18,
7 it indicates that the Company did incur, at least in
8 the interrogatory response, additional replacement
9 energy costs of \$417,000, correct?

10 A Bear with me a second.

11 Q Actually it's on Page 1. I keep flipping
12 back and forth.

13 A Right. That's correct.

14 Q And that the cost to remove the vehicle was
15 approximately \$39,000, correct?

16 A That is correct.

17 Q Has Florida Power and Light recovered the
18 cost to remove the vehicle from the driver of the
19 vehicle?

20 A Yes, we have. We, in fact, prosecuted the
21 driver in criminal activity. He was found guilty of
22 trespassing, and we also went after his insurance
23 company for what cost we could recover associated with
24 this event.

25 We recovered approximately \$44,000 to cover

1 our cost associated with the event, which correspond
2 to the activities that cost us approximately \$39,000.

3 In addition, we went to the limits of their
4 liability policy for fuel replacement costs.
5 Unfortunately, that was only at \$50,000.

6 Subsequently, we also looked at the assets of his
7 parents as well as the teenager; it was 17-year old
8 boy that drove into the canal, and found neither his
9 parents nor he had adequate assets to pursue.

10 Q So that I'm clear, you say that the Company
11 checked \$44,000?

12 A We collected approximately a total of
13 \$94,000 of which 50,000 got applied to replacement
14 fuel costs.

15 Q Is the amount that's reported in
16 Interrogatory 21 net of the \$54,000 -- \$50,000?

17 A No, it is not.

18 Q Can you please turn to Page 8 of 18.

19 A Okay.

20 Q And can you please describe the event
21 referred to here?

22 A Yes. What this refers to -- this is a pump,
23 very simply put, although it's a very large pump, 25
24 foot tall pump, that basically moves water to cool the
25 nuclear fuel. And periodically we will get a failure

1 of the pump's seal. We have had approximately 69 of
2 these failures since St. Lucie has first been in
3 operation. These failures occur because these seals
4 wear out. The time period for the failures are
5 somewhat random. We have had some fail in less than a
6 year; we have had some go as long as six years. This
7 particular one had been in service for about three
8 years. And as stated right in the first part of the
9 first paragraph, we had a seal failure and proceeded
10 to do the corrective action to replace that because we
11 cannot operate with a failed reactor pool pump seal.

12 Q Isn't it correct that the response indicates
13 that the attempt to restage the lower seal failed?

14 A Yes. What we did was in the interest of
15 trying to save as you can see here this 171 hours of
16 downtime, we applied a process that we had had some
17 success in the past with to attempt to repair the seal
18 while it was in service. This took approximately an
19 hour.

20 Q And because the restaging did not work, the
21 operators had to cool down and depressurize the
22 reactor coolant system so the seal could be replaced,
23 correct?

24 A That's not actually correct.

25 We would have had to cool down whether we

1 restaged or not to replace the seal. That is the only
2 way you can replace a seal. If we had been successful
3 with the restaging we wouldn't have had to cool down
4 but the fact was that the seal had already failed, so
5 cool down was the repair method.

6 Now, if we had been successful in restaging,
7 at a subsequent outage we would have still had to
8 replace this seal because that is a temporary type
9 repair.

10 Q When the attempt was made to restage the
11 seal, what was the operating temperature at that time?

12 A I think it was proximately 370 degrees.

13 Q And according to the interrogatory response
14 it indicates that a clear root cause cannot be
15 determined, correct?

16 A That is correct.

17 Q Is that still correct?

18 A That is still correct. That is often the
19 case with these seals. They are very complex pieces
20 of equipment that have very close tolerances, and once
21 they fail, if you will, the cause of it sometimes gets
22 washed away so there's nothing there to really look at
23 as evidence of what the failure mechanism was.

24 Q Is it correct that the procedure for filling
25 and venting the RCS specifies precautions regarding

1 the temperature of the reactor coolant system during
2 the restaging process?

3 A It specifies a temperature of less than 200
4 degrees as a personnel safety issue.

5 Q Does the vendor of the seal recommend any
6 precautions concerning the maximum seal package
7 temperature?

8 A He recommended, if I'm not mistaken, a
9 temperature of 250 degrees which we subsequently
10 changed with his concurrence to 300 degrees.

11 Q On August 2nd, when the attempted restage
12 was being performed, was the operator performing the
13 procedure experienced in that he had done it before?

14 A To my knowledge they were experienced, yes.

15 Q Did St. Lucie management give consent to the
16 operator's decision to restage the seal at 370
17 degrees?

18 A Well, there's a question of exactly what the
19 temperature was at the time but it was in that area,
20 and there was control room supervision in place, yes.

21 Q Is it correct that you stated that the seals
22 were approximately three years old?

23 A This particular seal was approximately three
24 years old, yes.

25 Q Is the age and condition of the seal

1 something that should be considered prior to
2 attempting a restage?

3 A No.

4 Q Attempting to restage it?

5 A No, not necessarily so.

6 Q I'm going to refer you back to POD No. 5,
7 Page 23 of 49?

8 A Okay.

9 Q Can you read the next to the last paragraph
10 into the record. Starts with "The licensee produced".

11 COMMISSIONER GARCIA: Where are we?

12 MS. JOHNSON: This is discovery response
13 that the Company provided to Staff. It's not an
14 exhibit.

15 COMMISSIONER GARCIA: Okay.

16 A "The licensee produced a Byron and Jackson
17 letter dated November 16th, 1990, which reported a
18 review of St. Lucie's proposed restaging process. The
19 letter stated that the proposed process was
20 acceptable. The letter also stated that the
21 application to process should consider initial seal
22 condition and age in determining whether to apply the
23 process.

24 Q Byron Jackson is the manufacturer of the
25 seal?

1 A Yes, it is.

2 Q So since 1990 the Company was on notice that
3 it should consider the condition and age of the seal
4 prior to starting a restaging process?

5 A Yes.

6 Q According to Interrogatory 21 the cost to
7 replace the seal was approximately 1.1 million
8 correct?

9 A That's correct.

10 Q And the additional replacement energy cost
11 \$2.1 million, correct?

12 A That's correct.

13 Q As the reactor coolant system was being
14 cooled down on August the 2nd, were there any other
15 unusual events happening at the plant at that time as
16 a result of the cool down?

17 A I'm not sure what you might mean by "unusual
18 events." I have identified the significant event on
19 August 2nd which the reactor coolant pump seal failure
20 was the issue we just talked about.

21 Q Isn't it true that on August 2nd, 1995, a
22 main steam isolation signal actuation occurred?

23 A Yes.

24 Q And this occurred because the operator did
25 not follow the block procedure/enunciator response

1 procedure?

2 A That is what the Nuclear Regulatory
3 Commission report says, I believe.

4 Q Are you familiar with that procedure?

5 A No, I am not, other than just in general
6 terms. I'm not familiar with the detail of it.

7 Q Can you elaborate on what you are familiar
8 with?

9 A Well, in my -- I gave a cursory review -- is
10 that -- and my finding on that particular review was
11 that that procedure is correct and has been in place
12 for some time, and it's applicable to the work the
13 individual was performing. The individual made a
14 mistake. And in that particular event he caused a
15 signal, electronic signal, if you will, to go through
16 when it should have been blocked.

17 Q Did this failure to follow procedure by the
18 operator extend the cool down or result in any
19 additional outages at St. Lucie 1?

20 A No, it was encompassed in, from my review of
21 it, as I stated here, within the work of the reactor
22 coolant pump seal effort.

23 Q Going back again to RLW-2, can you please
24 turn to Page 9 of 18:

25 A Now I've lost it. This is the NRC report

1 we're talking about?

2 Q No, I apologize. I'm back at your exhibit
3 that's attached to your testimony, RLW-2, which is
4 Interrogatory 21?

5 A Okay. I'm with you now. I'm sorry.

6 Q Okay.

7 A Page 9 of 18.

8 Q This event, which occurred on August 9th, is
9 described as power operator relief valve failures,
10 correct?

11 A That's correct.

12 Q And in your response to the interrogatory
13 the Company states that the valve failed due to
14 improper reassembly following the overhaul during the
15 1994 refueling outage, correct?

16 A That is correct. What exactly happened at
17 that time is that we had a contract personnel working
18 to our procedure. The procedure was correct. The
19 procedure specified the proper assembly of the valve
20 and also specified that he needed to sign off each of
21 the steps during that assembly. The contractor did do
22 those steps; he did sign off, and, in fact, still
23 performed the assembly incorrectly.

24 Q Is there currently any litigation against
25 the contractor regarding that event?

1 A Well, we're not technically into litigation
2 yet but we're exchanging correspondence requesting
3 them to reimburse us for some of these costs.

4 Q Had Florida Power and Light experienced any
5 other problems with this contractor in the past?

6 A No. This contractor is a nuclear quality
7 type contractor that does work throughout the
8 industry. Technicians meet applicable standards that
9 are in place for this site sort of work. They also
10 have their individuals trained at these procedures and
11 they have done this sort of work for us before.

12 We've reviewed other instances of their work
13 during this same time period and also found no
14 problems with that work.

15 Q It's true that this event resulted in a
16 total of 188 off-line hours, correct?

17 A That's correct.

18 Q And what was the additional cost for
19 replacement energy?

20 A Shown on Page 1, \$2.5 million.

21 Q Was there any additional cost to reassemble
22 and reinstall the valve?

23 A Yes. That's shown here as \$381,000.

24 Q Were the power operator relief valves tested
25 for operability after the 1994 overhaul?

1 A Yes.

2 Q Before returning them to service?

3 A The test of the power operator relief valves
4 is done in place and it's done by opening the valve
5 and closing it very quickly and detecting water flow
6 by acoustic monitors downstream of the valve. That
7 test was performed, but in evaluating the cause at
8 that point, we found that the acoustic monitors gave a
9 false positive test. So, in fact, the test did not
10 show the condition at that time. If it had, we would
11 have still had to come back down and shut down and
12 cool down and expend the same amount of time to
13 correct the vendor's error.

14 Q Was the cause of the problem with the
15 acoustic monitors determined?

16 A The acoustic monitors worked fine but it's
17 because of their relationship to some other equipment
18 that you can get under certain conditions a reading
19 that would indicate the valve opens but it really
20 didn't. So what we did after that point was we
21 provided other indications to the operators for more
22 positive indication, if you will, that the valve
23 moves.

24 Q Prior to the testing of the valves following
25 the 1994 overhaul, was St. Lucie management aware of

1 this condition with the monitors? That it would give
2 false positives because of the conditions?

3 A No, I don't believe they were.

4 Q Was there an alternative procedure for
5 determining if the valve could operate properly?

6 A No, I don't believe there was.

7 Q I'll ask you to turn to Page 10 of 18 of
8 Interrogatory No. 21.

9 A Okay.

10 Q This event is described as an inadvertent
11 spray down of containment, correct?

12 A That's correct.

13 Q Isn't it correct that on August 17th,
14 approximately 10,000 gallons of borated water as
15 inadvertently sprayed into the containment?

16 A Yes.

17 Q What is the significance about borated
18 water?

19 A Borated water refers to water that is
20 slightly acidic. What it has in it is an element
21 called boron that is used to basically attract
22 neutrons so it helps you shut down the plant in a
23 nuclear plant.

24 Q And according to the interrogatory response,
25 the cause of this shut down was determined to be a

1 procedural deficiency in the emergency core cooling
2 system venting procedure. Could you explain, please?

3 A Yes. This is a fairly complicated set of
4 systems that we were trying to get the air out of so
5 they would be filled solid with water. And the
6 systems were interrelated, one of them which was the
7 containment spray system with some other systems that
8 we were trying to vent.

9 The procedure -- there was several
10 procedures also that came into play. One procedure
11 set your boundaries for testing. In other words, it
12 says what valves needed to be closed. This particular
13 procedure didn't have the operator go back and make
14 sure that the original procedure had set the
15 boundaries properly. Because the boundaries weren't
16 set properly, it caused the spray down.

17 Q And isn't it correct that the problem
18 with -- strike that.

19 Isn't it correct that the containment spray
20 header control valve was left in its open position on
21 August 11th, 1996?

22 A Yes. That valve was intentionally left open
23 because it's a position that is appropriate to ensure
24 the maximum protection from a radiation safety
25 standpoint. There were other valves in the system,

1 | though, that could have been closed that would have
2 | allowed venting to procedure without a spray down
3 | event.

4 | Q As a result of leaving the valve open, there
5 | was a direct flow path from the refueling water tank
6 | to the A containment spray header and the open header
7 | control valve; is that correct?

8 | A I don't think it was as a result of leaving
9 | that valve open. As I said, there were other
10 | alternatives, other valves that could have been closed
11 | just as well as this one could have been closed to
12 | preclude he spray down event.

13 | Q Looking at the interrogatory response on
14 | Page 10 it states that "These actions provided a
15 | direct flow path from the refueling water tank to the
16 | ACS header and the open header control valve,"
17 | correct?

18 | A Yes.

19 | Q And the actions that it's referring to are
20 | the fact that the valve was left in its open position
21 | when the operator attempted -- the emergency cooling
22 | venting procedure?

23 | A No. The actions it's referring to is
24 | starting the pump and establishing flow through a heat
25 | exchanger. As I said, other valves could have been

1 closed and not had to spray them.

2 Q Why weren't they?

3 A Because of the procedural deficiency.

4 Q Aren't operators required to verify the
5 position of valves within the flow path before venting
6 the emergency core cooling and containment spray
7 systems?

8 A Not by this particular procedure. As I
9 said, they would have done that by a different
10 procedure, which if they had referred to and made the
11 ties, would have properly closed out the boundaries.

12 Q The fact that the valve was left in its open
13 position, was that ever recorded on any document or
14 report to alert other operators?

15 A Yes, it was.

16 Q What report or document is that?

17 A For one thing, it had a plant work order
18 written against it to be repaired, so that is one
19 source of documentation. There was a safety
20 evaluation done by engineering to demonstrate that
21 leaving the valve in its open position, which again
22 was appropriate for insuring the maximum protection
23 from a radiation standpoint was okay also. So at
24 least those two documents existed.

25 Q But there was not a requirement that the

1 operator on August 17th would refer to any of those
2 documents prior to beginning the procedure?

3 A From my personal standpoint the operator
4 should have been aware that those documents existed.
5 Those were not, if you will, hidden documents. They
6 were documents that were made available to the Control
7 Room. In fact, the Control Room is the one who
8 authorizes a plant work order. Whether this
9 particular operator was on station when that
10 particular valve was left open, I don't know. And for
11 whatever reason, he apparently did not realize that
12 the valve was open.

13 Q But according to your testimony he should
14 have known?

15 A Yes. I mean it was all there.

16 Q And this event resulted in a total of 343
17 off-line hours?

18 A That's correct.

19 Q And cost of cleaning of the containment area
20 was 899,000?

21 A Yes.

22 Q Replacement fuel cost was approximately
23 4.1 million?

24 A Yes, that's correct. (Pause)

25 MS. JOHNSON: We have no further questions.

1 COMMISSIONER DEASON: Redirect.

2 MR. CHILDS: Yes, I have some.

3 REDIRECT EXAMINATION

4 BY MR. CHILDS:

5 Q Do you know whether the contractors and
6 vendors that Florida Power and Light Company hires to
7 work at its St. Lucie plant are experienced in the
8 industry in performing the tasks they are asked to
9 perform?

10 A Yes. Not only are they experienced in what
11 they have to do, we have to go through an evaluation
12 process to make sure that they can perform the work to
13 certain quality control practices that we set forth.
14 So they are both experienced and trained and meet
15 quality control procedures that we set forth.

16 Q You were asked a question about root cause
17 analysis performed by Florida Power and Light Company?

18 A Yes.

19 Q Do you know whether any -- whether there was
20 any deficiency in root cause analysis that resulted in
21 any of the outage incidents we're talking about today?

22 A No, there wasn't. Root cause analysis
23 follows after an event. It's not a precursor to an
24 event occurring.

25 Q You were asked some questions about the

1 pressurizer code safety valve flange leakage --

2 A Yes.

3 Q -- by the Staff. That is the item -- let's
4 see, is that Page 12 of your document, interrogatory
5 21?

6 A Yes, it is.

7 Q Excuse me, just a moment. (Pause) How many
8 pressurizer code safety valves are there at St. Lucie
9 1 and 2?

10 A There are three on each of the units.

11 Q And do you know how frequently the gaskets
12 are replaced for these valves by Florida Power and
13 Light Company?

14 A At least every refueling outage. Because I
15 said during my other answer, we take those off to do
16 routine maintenance on them and when we put them back
17 we put new gaskets in.

18 Q Do you know how long gaskets of this
19 particular type had been used at St. Lucie?

20 A Since 1990 we've used these particular
21 gaskets. As it states here, it was part of a program
22 to get rid of asbestos, which was contained in the
23 previous gaskets.

24 Q And for how long had Florida Power and Light
25 followed the installation procedure for those gaskets

1 at St. Lucie?

2 A We have been doing this routinely since that
3 period of time and basically without incident.

4 Q Okay. I want to ask you some questions
5 about the vehicle in the discharge canal. You
6 mentioned there were other barriers. Would you tell
7 us what you meant by that?

8 A Yes. This particular area is, of course,
9 kind of in a mangrove-type area, as well as having the
10 the canals. The canals, in addition to being a canal,
11 have a berm which is approximately 7 foot tall and
12 built at approximately a 60 degree incline on each
13 side of the canal, so that this, again, provides a
14 preventive barrier, if you will, from individuals
15 hopefully, we would think, driving into the the canal.
16 So this particular teenager had to go through some
17 effort to climb that berm and get into the canal.

18 Q And is it correct that this particular road
19 that was being followed by this vehicle is not toward
20 the power plant at St. Lucie?

21 A That's correct. As I stated before, it's on
22 the east side of this Highway A1A. The plant is on
23 the west side. And this road follows around the beach
24 area and the mangroves on the Atlantic Ocean side.

25 Q Do you know whether this particular item,

1 that is the vehicle in the discharge canal, has been
2 previously addressed by this Commission?

3 A Yes. It's my understanding that it was
4 addressed and stipulated to as part of the GPIF
5 filing.

6 Q You were asked also about the turbine trip
7 during surveillance testing, which I think is Page 5
8 of your --

9 A Yes.

10 Q -- yes, of your Interrogatory 21.

11 Was the operator involved there experienced?

12 A Yes, this particular employee had
13 significant experience. He had been an operator at
14 our station for 13 years and had progressively met
15 qualifications for advancement. In addition, he had
16 been independently certified by the Nuclear Regulatory
17 Commission for the position he held.

18 Q Do you know whether that operator was
19 trained to perform the steps that were associated with
20 this testing correctly?

21 A Yes. He was not only trained, he had
22 performed this test successfully before.

23 Q And were there applicable procedures for the
24 plant at the plant for the closing of the valve?

25 A Yes. The procedures were written, available

1 and correct.

2 Q You were also asked questions about the
3 reactor coolant seal pump package failure. I can't
4 find that. That's on Page 8?

5 A Yes.

6 Q Does FPL have a practice of replacing the
7 reactor coolant pump seal packages prior to an
8 indication of failure?

9 A No, we do not. And the reason for that is
10 partly brought out in my testimony here. In the time
11 it takes to replace one of these seals and the cost,
12 because of the random nature of these wear-outs, and
13 the fact you can't easily predict when one will occur,
14 if you were into a program where you just arbitrarily,
15 over a period of time, replaced these, that's no
16 guarantee that you couldn't immediately have another
17 one fail at an unexpected moment. So we do not do
18 that.

19 Q Does FPL maintain spare seal packages --

20 A Yes, sir.

21 Q -- on site?

22 A We maintain five at St. Lucie.

23 Q Why is that?

24 A The reason for that is to minimize, to the
25 extent we can, the down time from the seal failure by

1 having at least the replacement readily available.

2 Q Do you know whether the industry has
3 directed attention to attempting to reduce the reactor
4 coolant pump seal package failures?

5 A Yes. This is an industry issue, and they
6 have looked at possible options for upgrades, other
7 types of preventative measures to minimize seal
8 failures. The change out frequency in the industry
9 for this sort of thing runs 18 to 36 months.

10 Q Staff asked you some questions about the
11 Company's restaging attempt for this seal. Is it
12 correct that a restaging attempt is an attempt to
13 avoid having to replace the seal?

14 A No. It's an attempt to defer replacement to
15 some other period of time.

16 Q So that if the Company had been successful
17 in restaging, the seal would have had to have been
18 replaced at some time?

19 A Yes.

20 Q Well, I guess, let me restate that, I assume
21 all seals would have to be replaced at some time. But
22 my point is would this particular seal have to be
23 replaced because of indication of difficulty had been
24 seen?

25 A Yes.

1 Q Okay. I'm going to speak to the power
2 operated relief valve failure, which I think is on
3 Page 9. Was this reassembly performed by FPL by a
4 vendor?

5 A This reassembly was performed by a vendor.

6 Q Do you know whether the technicians that
7 performed the repair were qualified?

8 A Yes. They were qualified to American
9 National Standards Institute qualifications, as well
10 as the American Society of Mechanical Engineers. They
11 were also qualified on the specific procedure
12 applicable for reassembly of this valve.

13 Q Did FPL have a procedure which if followed
14 would have resulted in a correct reassembly?

15 A Yes. The procedure was written, it was
16 correct and it had sign-offs for each stat.

17 Q I think you said that the technician signed
18 off that he or she had performed the steps correctly?

19 A That is correct.

20 Q If testing had shown earlier that there had
21 been an incorrect reassembly, would the time to repair
22 have been any different than that was actually taken
23 to repair?

24 A It would not have been materially different.

25 Q I want to move now to the question of a

1 spray down of containment, which is on Page 10 of your
2 Document No. 1.

3 Would you explain the term "safeguards
4 position" as it relates to the condition in which the
5 valve was left?

6 A This refers to, if you will, a nuclear
7 regulatory type situation where the valve is left in a
8 position that's appropriate to provide the maximum
9 protection for radiological safety.

10 Q Okay. Can you tell us whether the procedure
11 for the emergency core cooling venting was adequate
12 for normal plant operations?

13 A Yes, it was.

14 Q Can you tell us how this venting procedure
15 compares to industry procedures?

16 A This is a routine type event that's done at
17 power plants and it's done, and has been done on our
18 own, since the initial start-up dates. It's not
19 unique to us, and that venting is a common practice.

20 Q Okay. You were asked some questions about a
21 report that was produced in discovery from the Nuclear
22 Regulatory Commission. Do you recall those questions,
23 specifically you were asked and referred to Page 23 of
24 49 of that report and I think also to Page 17 of that
25 report?

1 A Yes.

2 Q Will you tell us whether to your knowledge
3 the standards for action by FPL at its nuclear plants
4 are stringent because of the concern over radiological
5 health and safety?

6 A They are.

7 Q Do you know whether those standards are
8 generally applicable in the industry for viewing
9 performance in other contexts such as in this
10 Commission, or by this Commission?

11 A The standards that are applicable here from
12 a radiological standpoint, which is what the NRC
13 reports attempt to address, in my mind differ from the
14 standards of appropriate and prudent operation which
15 says that whenever possible you should operate your
16 units to the maximum benefit of the customers.

17 MR. CHILDS: That was all I have.

18 COMMISSIONER DEASON: Exhibits.

19 MR. CHILDS: I'd like to move into evidence
20 Exhibit 12 and 13.

21 COMMISSIONER DEASON: Without objection
22 exhibits 12 and 13 are admitted.

23 (Exhibit 12 and 13 received in evidence.)

24 MR. CHILDS: Next witness is Mr. Silva.

25 While Mr. Silva is coming to the stand,

1 Commissioner, we're going to be offering and
2 addressing as to Issue 11a Mr. Silva's supplemental
3 testimony that was filed on July 26th, 1996, and he is
4 sponsoring in that testimony what has been marked as
5 Exhibit 4.

6 COMMISSIONER DEASON: Very well.

7 - - - - -

8 RENE SILVA

9 was called as a witness on behalf of Florida Power &
10 Light Company and, having been duly sworn, testified
11 as follows:

12 DIRECT EXAMINATION

13 BY MR. CHILDS:

14 Q Mr. Silva, have you been sworn?

15 A Yes, I have.

16 Q Would you state your name and address?

17 A My name is Rene Silva. My business address
18 is 9250 West Flagler Street, Miami, Florida 33174.

19 Q By whom are you employed and in what
20 capacity?

21 A By Florida Power and Light Company as
22 Manager of Forecasting and Regulatory Response in the
23 Power Generation Business Unit.

24 Q You have before you a document entitled
25 "Supplemental Testimony of Rene Silva, Docket

1 960001-EI, July 26, 1996"?

2 A Yes.

3 Q Was that prepared by you as your direct
4 testimony for this proceeding?

5 A Yes.

6 Q Do you have any changes or corrections to
7 make to it or the document you are sponsoring?

8 A No.

9 Q Do you adopt it as your testimony?

10 A Yes.

11 MR. CHILDS: Commissioner, we ask that the
12 prepared testimony of Mr. Silva be inserted into the
13 record as though read.

14 COMMISSIONER DEASON: Without objection it
15 will be so inserted.

16 MR. CHILDS: At this time I'd like to ask
17 that the other testimony that Mr. Silva is sponsoring
18 generally, or whenever you think it is convenient, I
19 want to make sure that is inserted into the record.

20 COMMISSIONER DEASON: Now would be --

21 MR. CHILDS: He has testimony on GPIF dated
22 5-20-96. Revised GPIF testimony dated July 22, '96.
23 Testimony on GPIF dated 6-24-96. Revised testimony
24 dated 8-7-96, and fuel testimony dated June 24, 1996.
25 And all parties have this and I just formally would

1 ask it be part of the record.

2 **COMMISSIONER DEASON:** Without objection that
3 testimony will be inserted into the record.

4 **MR. CHILDS:** And his exhibits are 1, 2 and 3
5 associated with that testimony.

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

SUPPLEMENTAL TESTIMONY OF RENE SILVA

DOCKET NO. 960001-EI

July 26, 1996

1 Q Please state your name and address.

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

4

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

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

9

10 Q. Have you previously testified in this docket?

11 A. Yes.

12

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

14 A. The purpose of my supplemental testimony is to provide additional

1 information regarding FPL's response to Interrogatory No. 19 and 21
2 in Staff's 3rd Set of Interrogatories. The response to Interrogatory
3 No. 19 explains how the outages that occurred since April 1995 at the
4 St. Lucie plant affected FPL's Generating Performance Incentive
5 Factor reward/penalty amount for the period April through September
6 1995. The response to Interrogatory No. 21 provides the replacement
7 energy and cost of the replacement energy associated with the outages
8 that occurred from September 1994 through September 1995 at the St.
9 Lucie plant.

10
11 **Q. Have you prepared or caused to be prepared under your**
12 **supervision, direction and control an Exhibit in this proceeding?**

13 **A. Yes, I have. It consists of Document No. 1.**

14
15 **Q. Were the outages at the St. Lucie Units 1 and 2 during the period**
16 **September 1994 through September 1995 an issue during the**
17 **February 1996 Fuel proceedings?**

18 **A. Yes. During the February 1996 Fuel proceedings, the issue: Should**
19 **FPL recover replacement energy costs resulting from outages at the St.**
20 **Lucie Plant during the period September 1994 through September**
21 **1995, was raised by the Commission Staff. The issue was deferred**

1 from the February 1996 hearing to allow time for additional discovery.
2 FPL originally filed responses to Staff's Third Set of Interrogatories
3 on November 3, 1995. Interrogatory No. 19 is attached to my
4 supplemental testimony as Document No 1. Recently the Commission
5 Staff asked additional questions regarding the interrogatory response.
6 These questions and FPL's responses to them are provided below.

7
8 **Q. In your response to Interrogatory No. 19, Pages 7 and 9,**
9 **adjustments have been made to the Actual Equivalent Availability.**
10 **Is there some document or order which allows these adjustments**
11 **to be made?**

12 **A.** Yes. Adjustments to a GPIF unit's Actual Equivalent Availability
13 are permitted as described in the GPIF Implementation Manual
14 established by the FPSC on July 28, 1981 in Order No. 10168 for
15 Docket No. 810001-CI. Section 4.3.1 of the manual provides for the
16 adjustment of Equivalent Availability upon review by the
17 Commission. The Commission recognized adjustments for the
18 following categories:

- 19 ■ Natural or externally caused disaster
- 20 ■ Unforeseen shutdown due to regulatory agency action
- 21 ■ Rescheduling of planned maintenance

- 1 ■ Changes in the work scope of planned outages
2 ■ Differences between actual and forecast reserve shutdowns
3 (if reserve shutdowns are used in setting the Equivalent
4 Availability target)

5
6 Q. For your response to Interrogatory No. 19, Pages 3 and 7, please spell
7 out or define the abbreviated descriptions.

8 A. Interrogatory No. 19, Page 3 of 11, April 7, 1995 "Control Rod Drive
9 PO." - control rod drive power supply.

10

11 Interrogatory 19, Page 3 of 11, April 9, 1995 "Chemistry hold" - Chemistry
12 hold during plant start up for chemistry analysis.

13

14 Interrogatory 19, Page 3 of 11, August 2, 1995 "NE Intercept Valve" - North
15 East turbine intercept valve.

16

17 Interrogatory No. 19, Page 7 of 11, June 11, 1995 "DC saf. sys. pwr. supp."
18 - Direct current safety system power supply. Outage was a PFO (Partial
19 Forced Outage) because the unit remained online at 40% power to make
20 necessary repairs.

21

22 Interrogatory No. 19, Page 7 of 11, July 9, 1995 "RPS "C" wide range NI" -

1 Reactor Protection System Channel "C" wide range nuclear instrumentation.

2

3 Interrogatory No. 19, Page 7 of 11, August 9, 1995 "PORVS" - Power

4 Operated Relief Valves. This outage is explained in detail in FPL Witness

5 R. L. Wade's Supplemental Testimony, Document No. 1, Page 9 of 18.

6

7 Q. In your response to Interrogatory No. 19, Page 9, the description
8 "waterbox cleaning" is used a number of times. Please define waterbox
9 cleaning and why is it done so often?

10 A. The condensers use salt water from the Atlantic Ocean as the source of
11 cooling water. Marine growth and sediment can deposit on the tube sheets
12 reducing the condensers' heat transfer capacity. Frequent cleanings are
13 required to remove these obstructions from the tube sheet.

14

15 Q. In your response to Interrogatory No. 21, page 2, Assumption No. 3
16 states that the average cost of PSL energy was assumed to be \$5.58 and
17 \$6.75 for St. Lucie Units 1 and 2 respectively. What are these figures
18 based on?

19 A. They are the actual average fuel cost of each unit for the period September
20 1994 through September 1995.

21

22 Q. Does this conclude your testimony?

23 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF R. SILVA

DOCKET NO. 960001-EI

MAY 20, 1996

- 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
6 Florida 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
11 docket?
- 12 A. Yes, I have.
13
- 14 Q. Mr. Silva, what is the purpose of your testimony?
- 15 A. The purpose of my testimony is to present the actual performance
16 results for the Equivalent Availability Factor (EAF) and Average
17 Net Operating Heat Rate (ANOHR) for the seventeen (17) units
18 used to determine the Generating Performance Incentive Factor
19 (GPIF) and to compare these actual results to the targets that were

1 approved in Commission Order No. PSC-95-0450-FOF-EI issued
2 March 31, 1995 for the period October, 1995 through March, 1996.
3 On the basis of this comparison, I have calculated an incentive
4 amount for the period.
5

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

8 A. Yes, I have. It consists of one document. Page 1 of that document is
9 an index to the contents of the document.
10

11 Q. What is the incentive amount you have calculated for the period
12 October, 1995 through March, 1996?

13 A. I have calculated a GPIF reward of \$ 1,980,538.
14

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

16 A. The steps involved in making this calculation are contained in
17 Document No. 1. Page 2 of Document No. 1 is the GPIF
18 Reward/Penalty Table (Actual) and shows an overall GPIF
19 performance point value of +2.1743 which corresponds to a GPIF
20 reward of \$ 1,980,538. Page 3 is the calculation of the maximum
21 allowed incentive dollars. The calculation of the system actual
22 GPIF performance is shown on page 4. This page lists each unit,
23 the performance indicators (ANOHR and EAF), the weighing
24 factors and the associated GPIF points.
25

1 Page 5 is the actual EAF and adjustments summary. This page lists
2 each of the seventeen (17) units, the actual outage factors and the
3 actual EAF in columns 1 through 5. Column 6 is the adjustment for
4 planned outage variation, which is shown on page 6. Column 7 is
5 the adjusted actual EAF and Column 8 is the target EAF. Column 9
6 contains the Generating Performance Incentive Points for
7 availability as determined from the tables submitted to and
8 approved by the Commission prior to the start of the period.
9 These tables are shown on pages 8 through 24.

10
11 Page 7 shows the adjustments to ANOHR. For each of the
12 seventeen (17) units, it shows the target heat rate formula, the
13 actual Net Output Factor (NOF) and the actual ANOHR in
14 columns 1 through 4. Since heat rate varies with NOF, it is
15 necessary to determine both the target and actual heat rates at the
16 same NOF. This adjustment is to provide a common basis for
17 comparison purposes and is shown numerically for each GPIF unit
18 in columns 5 through 8. Column 9 contains the Generating
19 Performance Incentive Points that have been determined from the
20 table submitted for each unit and approved by the Commission.
21 These same tables are shown on pages 8 through 24.

22
23 Q. Are there any changes to the targets approved through
24 Commission Order No. PSC-95-0450-FOF-EI ?

1 A. No, the approved targets have not changed. However, the actual
2 availability (EAF) of Turkey Point Unit 3, used in the calculation of
3 the GPIF, have been adjusted to compensate for the loss in unit
4 availability resulting from externally caused events in January and
5 February 1996.

6
7 Q. Can you describe these externally caused events ?

8 A. Yes. An abnormally large amount of cooling canal vegetation
9 obstructed the flow of water used in the cooling of plant
10 equipment. As a result, Turkey Point Unit 3 experienced a full
11 forced outage on February 16, 1996 and a partial forced derated
12 outage on January 31, 1996. Dead aquatic cooling canal vegetation
13 was transported by winds to the intake structure in sufficient
14 quantities, over a relatively short period of time, so as to exceed the
15 capability of the debris removal system. This caused diminished
16 cooling water supply to the unit resulting in operation at reduced
17 power in one case and complete removal from power production in
18 the other. Since the obstruction caused by the build up of canal
19 vegetation was an unpredictable, externally caused event, neither
20 FPL nor the customer should be penalized for the resulting loss in
21 availability. Therefore, the loss in availability caused by the canal
22 vegetation has be excluded from the GPIF calculation by adjusting
23 the actual equivalent availability (EAF) of Turkey Point Unit 3 for
24 the October 1995, through March, 1996 period. In addition, the

1 occurrence will be excluded from the GPIF calculations performed
2 to determine future availability targets of Turkey Point Unit 3.

3

4 Q. How was the actual EAF of Turkey Point 3 affected by the external
5 events?

6 A. The full forced outage hours and equivalent partial forced outage
7 hours due to the canal vegetation obstruction were removed from
8 the total equivalent forced outage hours during the October, 1995
9 through March, 1996 period. The period hours were also reduced
10 by the number of full forced outage hours. The actual EAF for
11 Turkey Point Unit 3 was recalculated with the adjusted outage and
12 total period hours. The equivalent forced outage hours were
13 reduced by 89.3 equivalent hours from 302.5 hours to 213.2 hours.
14 The period hours were reduced from 4393 hours to 4310 hours. The
15 period hours were not reduced for the partial outage hours since
16 the unit was still on line and exposed to failure. The adjustment
17 changed the actual EAF for Turkey Point Unit 3 from 79.0 % to 80.8
18 %. There was no adjustment made to the actual POH since the
19 planned outage occurred in September, 1995 through October, 1995.

20

21 This methodology is consistent with that used in the past to adjust
22 for externally caused events such as Hurricane Andrew, and the
23 jellyfish obstruction at the St. Lucie Nuclear plant.

24

1 Q. Mr. Silva, will you explain the primary reason or reasons why FPL
2 will be rewarded under the GPIF for the October 1995, through
3 March, 1996 period ?

4 A. Yes. The primary reason that FPL will receive a reward for the
5 period was that Turkey Point Nuclear Unit 4 and St. Lucie Nuclear
6 Unit 2 had better availability than was projected.

7

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

10 A. Turkey Point Unit 3 operated at an adjusted actual EAF of 80.8% as
11 compared to its target of 79.8%. This will result in a +3.33 point
12 reward which corresponds to a GPIF reward of \$ 360,045.

13

14 Turkey Point Unit 4 operated at an adjusted actual EAF of 82.6% as
15 compared to its target of 76.8%. This will result in a +10.00 point
16 reward which corresponds to a GPIF reward of \$ 1,101,254.

17

18 St. Lucie Unit 1 operated at an adjusted actual EAF of 85.7% as
19 compared to its target of 89.6%. This will result in a -10.00 point
20 penalty which corresponds to a GPIF penalty of (\$1,574,912).

21

22 St. Lucie Unit 2 operated at an adjusted actual EAF of 67.8% as
23 compared to its target of 58.8%. This will result in a +10.00 point
24 reward which corresponds to a GPIF reward of \$1,315,311.

25

1 The total GPIF reward for the nuclear units' availability
2 performance is \$1,201,698.

3

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

6 A. Turkey Point nuclear unit 3 operated with an adjusted actual
7 ANOHR of 10793 BTU/KWH which was better than projected by
8 81 BTU/KWH. This results in a 1.00 point reward which
9 corresponds to a GPIF reward of \$22,225.

10

11 Turkey Point nuclear unit 4 operated with an adjusted actual
12 ANOHR of 10869 BTU/KWH which was better than projected by
13 43 BTU/KWH. This ANOHR is within ± 75 BTU/KWH of the
14 projected target, therefore there is no GPIF reward or penalty.

15

16 St. Lucie nuclear unit 1 operated with an adjusted actual ANOHR
17 of 10897 BTU/KWH which was poorer than projected by 69
18 BTU/KWH. This ANOHR is within ± 75 BTU/KWH of the
19 projected target, therefore there is no GPIF reward or penalty.

20

21 St. Lucie nuclear unit 2 operated with an adjusted actual ANOHR
22 of 10728 BTU/KWH which was better than projected by 128
23 BTU/KWH. This will result in a 3.18 point reward which
24 corresponds to a GPIF reward of \$139,326.

25

1 The total reward for the nuclear units' heat rate performance is
2 \$161,551.

3

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

6 A. \$1,363,249.

7

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

10 A. The performance of the thirteen (13) fossil units included in the
11 GPIF for the period of October 1995, through March, 1996 will
12 receive a total combined GPIF reward of \$617,289 for EAF and
13 ANOHR.

14

15 Ten (10) of the units performed better than their availability
16 targets, while the remaining three (3) performed poorer than their
17 targets. The combined fossil unit availability performance will
18 result in a GPIF reward of \$264,179.

19

20 Six (6) of the units operated with ANOHR's that were better than
21 projected and four (4) units operated with ANOHR's that were
22 poorer than projected. The remaining three (3) units were within
23 the + 75 BTU/KWH dead band and they will receive no incentive
24 reward or penalty. The combined fossil unit heat rate performance
25 will result in a GPIF reward of \$353,110.

1

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

3 A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
FLORIDA POWER & LIGHT COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
REVISED TESTIMONY OF RENE SILVA
DOCKET NO. 960001-EI
JULY 22, 1996

- 1 **Q** Please state your name and address.
- 2 A. My name is Rene Silva. My business address is 9250 W. Flagler
3 Street, Miami, Florida 33174.
4
- 5 **Q.** By whom are you employed and what is your position?
- 6 A. I am employed by Florida Power & Light Company (FPL) as Manager
7 of Forecasting and Regulatory Response in the Power Generation
8 Business Unit.
9
- 10 **Q.** Have you previously testified in this docket?
- 11 A. Yes.
12
- 13 **Q.** What is the purpose of your testimony?
- 14 A. The purpose of my testimony is to provide corrections to my

1 Generating Performance Incentive Factor (GPIF) True up Testimony
2 that was filed on May 20, 1996.

3

4 **Q. Please describe the correction.**

5 A. Due to changes in FPL's computer program, the Net Operating Factor
6 (NOF) for Port Everglades Unit 3 was calculated incorrectly. The
7 NOF reported in the true up testimony was 56%. The correct NOF is
8 58.7%

9

10 **Q. Have you prepared any exhibits that reflect this correction?**

11 A. Yes. I have provided four revised pages to my Document No. 1. They
12 include pages 2, 4, 7, and 13. These pages reflect the correct numbers
13 for Net Operating Factor, Average Net Operating Heat Rate, Adjusted
14 Average Net Operating Heat Rate and GPIF points.

15

16 **Q. Does this change impact the reward that was calculated in the
17 May 20, 1996 True up filing?**

18 A. Yes. The GPIF reward changes from \$1,980,538 to \$1,947,105.

19

20 **Q. Does the change to the GPIF reward cause the fuel factors to
21 change?**

1 A. No. The change to the GPIF reward does not cause a change to the
2 fuel factors.

3

4 Q. Does this conclude your testimony?

5 A. Yes, it does.

6

7

8

1 Q Please state your name and address.

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

4
5 Q. By whom are you employed and what is your position?

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

9
10 Q. Have you previously testified in this docket?

11 A. Yes.

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

14 A. The purpose of my testimony is to provide corrections to my

1

1 Generating Performance Incentive Factor (GPIF) Testimony and was
2 filed on June 24, 1996.

3
4 Q. Please describe the correction.

5 A. Due to changes in FPL's computer program, the Equivalent
6 Availability Factor (EAF) for Martin Unit 3, Putnam Units 1 & 2,
7 Turkey Point Unit 4, and St. Lucie Unit 2 were calculated incorrectly.
8 The EAF reported in my testimony were 95.2%, 89.3%, 87.8%, 89.2%
9 and 81.2%, respectively. The correct EAFs are 94.5%, 87.3%, 88.0%,
10 89.4% and 81.5%, respectively.

11
12 Q. Have you prepared any exhibits that reflect this correction?

13 A. Yes. I have provided two revised pages to my Document No. 1. They
14 are pages 6 and 10. These pages reflect the correct numbers for the
15 Equivalent Availability Factors.

16
17 Q. Does this conclude your testimony?

18 A. Yes, it does.

19
20
21

2

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RENE SILVA

DOCKET NO. 960001-EI

June 24, 1996

1 Q Please state your name and address.

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

4

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

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

9

10 Q. Have you previously testified in this docket?

11 A. Yes.

12

13 Q. What is the purpose of your testimony?

14 A. The purpose of my testimony is to present and explain FPL's
15 projections for (1) dispatch costs of heavy fuel oil, light fuel oil, coal

1 and natural gas, (2) availability of natural gas to FPL, (3) generating
2 unit heat rates and availabilities, and (4) quantities and costs of
3 interchange and other power transactions. These projected values were
4 used as input values to POWRSYM in the calculation of the proposed
5 fuel cost recovery factor for the period October, 1996 through
6 March, 1997.

7

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

10 A. Yes, I have. It consists of pages 1 through 7 of Appendix I of this
11 filing.

12

13 **Q. What are the key factors that could affect FPL's price for heavy**
14 **fuel oil during the October, 1996 through March, 1997 period?**

15 A. The key factors are (1) demand for crude oil and petroleum products
16 (including heavy fuel oil), (2) non-OPEC crude oil production, (3) the
17 extent to which OPEC production matches actual demand for OPEC
18 crude oil, (4) the relationship between heavy fuel oil and crude oil,
19 and (5) the terms of FPL's heavy fuel oil supply and transportation
20 contracts.

21

1 In general, world demand for crude oil and petroleum products is
2 projected to continue to increase at a moderate rate through 1997 as
3 a result of continued economic growth in the Pacific Rim countries.

4
5 On the supply side, total non-OPEC crude oil production is projected
6 to rise slightly through 1997 due to increases in the North Sea and
7 Latin America. The balance of the projected increase in crude oil
8 demand is projected to be adequately met by a slight increase in
9 OPEC production.

10

11 Based on these factors crude oil prices, and consequently heavy fuel
12 oil prices, for the October, 1996 to March, 1997 period will be
13 slightly lower than for the October, 1995 to March, 1996 period.

14

15 **Q. What is the projected relationship between heavy fuel oil and**
16 **crude oil prices during the October, 1996 through March, 1997**
17 **period?**

18 **A.** The price of heavy fuel oil on the U. S. Gulf Coast (1.0% sulfur) is
19 projected to be approximately 78% of the price of West Texas
20 Intermediate (WTI) crude oil.

21

- 1 **Q.** Please provide FPL's projection for the dispatch cost of heavy fuel
2 oil for the October, 1996 through March, 1997 period.
- 3 **A.** FPL's projection for the system average dispatch cost of heavy fuel
4 oil, by sulfur grade, by month, is provided on page 3 of Appendix I
5 in dollars per barrel.
- 6
- 7 **Q.** What are the key factors that could affect the price of light fuel
8 oil?
- 9 **A.** The key factors that affect the price of light fuel oil are similar to
10 those described above for heavy fuel oil.
- 11
- 12 **Q.** Please provide FPL's projection for the dispatch cost of light fuel
13 oil for the period from October, 1996 to March, 1997.
- 14 **A.** FPL's projection for the average dispatch cost of light oil, by sulfur
15 grade, by month, is shown on page 4 of Appendix I.
- 16
- 17 **Q.** What is the basis for FPL's projections of the dispatch cost of
18 coal?
- 19 **A.** FPL's projected dispatch cost of coal is based on FPL's price
20 projection of spot coal delivered to its coal plants.
- 21

1 For St. Johns River Power Park (SJRPP), annual coal volumes
2 delivered under long-term contracts are fixed on October 1st of the
3 previous year. For Scherer Plant, the annual volume of coal delivered
4 under long-term contracts is set by the terms of the contracts.
5 Therefore, the price of coal delivered under long-term contracts does
6 not affect the daily dispatch decision. The dispatch price of coal for
7 each coal plant is based on the variable component of the coal cost,
8 the projected spot coal price.

9
10 **Q. Please provide FPL's projection for the dispatch cost of coal for**
11 **the October, 1996 through March, 1997 period.**

12 A. FPL's projected system average dispatch cost of coal, shown on page
13 5 of Appendix I, is about \$1.50 per million BTU, delivered to plant.

14
15
16 **Q. What are the factors that can affect FPL's natural gas prices**
17 **during the October, 1996 through March, 1997 period?**

18 A. In general, the key factors are (1) domestic natural gas demand and
19 supply, (2) foreign natural gas imports, (3) heavy fuel oil prices and
20 (4) the terms of FPL's gas supply and transportation contracts. For the
21 projected period, the dominant factor influencing the price of gas will

1 be strong gas demand caused by the current low level of gas
2 inventory.

3
4 Every year, between the months of April and October, natural gas
5 market inventories are built up as a reserve in preparation for peak
6 winter gas demand. These inventories are partially drawn down during
7 the winter months as needed. Only a portion of the gas reserve is used
8 during the winter, and the impact on summer demand of restoring
9 inventory to the desired level is usually moderate. However, the
10 quantity of natural gas in inventory at the beginning of the winter of
11 1995-1996 was lower than in previous years. And colder than normal
12 weather during the winter caused a very large draw on inventory to
13 meet the strong gas demand. As a result, the quantity of gas in
14 inventory in April and May, 1996 - the beginning of the gas
15 "injection" season - was much lower than it has been in the past, and
16 it is projected that gas inventory will not even reach the year-earlier
17 level by the end of the "injection" season in October, 1996.

18
19 It is projected that this situation will keep demand for natural gas very
20 strong during the summer and continuing through the winter of 1996-
21 1997. Consequently, gas prices are projected to remain firm through

1 March, 1997.

2

3 **Q. What are the factors that affect the availability of natural gas to**
4 **FPL during the October, 1996 through March, 1997 period?**

5 **A.** The key factors are (1) the existing capacity of natural gas
6 transportation facilities into Florida, (2) the portion of that capacity
7 that is contractually allocated to FPL on a firm, "guaranteed" basis
8 each month and (3) the natural gas demand in the State of Florida.

9

10 The current capacity of natural gas transportation facilities into the
11 State of Florida is 1,455,000 million BTU per day (including FPL's
12 firm allocation of 455,000 to 480,000 million BTU per day, depending
13 on the month). Total demand for natural gas in the State during the
14 period (including FPL's firm allocation) is projected to be between
15 255,000 and 265,000 million BTU per day below the pipeline's total
16 capacity. This projected available pipeline capacity could enable FPL
17 to acquire and deliver additional natural gas, beyond FPL's 455,000
18 to 480,000 million BTU per day of firm, "guaranteed" allocation,
19 should it be economically attractive, relative to other energy choices.

20

21 **Q. Please provide FPL's projections for the dispatch cost and**

- 1 **availability (to FPL) of natural gas for the October, 1996 through**
2 **March, 1997 period.**
- 3 A. FPL's projections of the system average dispatch cost and availability
4 of natural gas are provided on page 6 of Appendix I.
5
- 6 **Q. Please describe how you have developed the projected unit**
7 **Average Net Operating Heat Rates shown on Schedule E4 of**
8 **Appendix II.**
- 9 A. The projected Average Net Operating Heat Rates were developed
10 using the actual monthly Average Net Operating Heat Rates and the
11 corresponding Net Output Factors from previous October through
12 March periods. This historical data was used to calculate an efficiency
13 factor, or heat rate multiplier, for each generating unit. The most
14 recent unit dispatch heat rate curves, modified by the unit's efficiency
15 factors, were provided as input to the POWRSYM model.
16
- 17 **Q. Are you providing the outage factors projected for the period**
18 **October, 1996 through March, 1997?**
- 19 A. Yes. This data is shown on page 7 of Appendix I.
20
- 21 **Q. How were the outage factors for this period developed?**

1 A. The unplanned outage factors were developed using the actual
2 historical full and partial outage event data for each of the units. The
3 actual unplanned outage factor of each generating unit for the previous
4 twelve-month period was adjusted, as necessary, to eliminate non-
5 recurring events and recognize the effect of planned outages to arrive
6 at the projected factor for the October, 1996 through March, 1997
7 period.

8

9 **Q. Please describe significant planned outages for the October, 1996
10 through March, 1997 period.**

11 A. Planned outages at our nuclear units are the most significant in
12 relation to Fuel Cost Recovery. Turkey Point Unit No.3 is scheduled
13 to be out of service for refueling beginning on March 8, 1997 and
14 until April 21, 1997, or twenty four days during the projected period.
15 There are no other significant planned outages during the projected
16 period.

17

18 **Q. Are any changes to FPL's generation capacity planned during the
19 October, 1996 through March, 1997 period?**

20 A. No.

21

- 1 **Q.** **Are you providing the projected interchange and purchased power**
2 **transactions forecasted for October, 1996 through March, 1997?**
- 3 A. Yes. This data is shown on Schedules E6, E7, E8, and E9 of
4 Appendix II of this filing.
- 5
- 6 **Q.** **In what types of interchange transactions does FPL engage?**
- 7 A. FPL purchases interchange power from others under several types of
8 interchange transactions which have been previously described in this
9 docket: Emergency - Schedule A; Short Term Firm - Schedule B;
10 Economy - Schedule C; Extended Economy - Schedule X;
11 Opportunity Sales - Schedule OS; UPS Replacement Energy -
12 Schedule R and Economic Energy Participation - Schedule EP.
- 13 For services provided by FPL to other utilities, FPL has developed
14 amended Interchange Service Schedules, including AF (Emergency),
15 BF (Scheduled Maintenance), CF (Economy), DF (Outage), and XF
16 (Extended Economy). These amended schedules replace and supersede
17 existing Interchange Service Schedules A, B, C, D, and X for services
18 provided by FPL.
- 19
- 20 **Q.** **Does FPL have arrangements other than interchange agreements**
21 **for the purchase of electric power and energy which are included**

1 **in your projections?**

2 A. Yes. FPL purchases coal-by-wire electrical energy under the 1988
3 Unit Power Sales Agreement (UPS) with the Southern Companies.
4 FPL has contracts to purchase nuclear energy under the St. Lucie
5 Plant Nuclear Reliability Exchange Agreements with Orlando Utilities
6 Commission (OUC) and Florida Municipal Power Agency (FMPA).
7 FPL also purchases energy from JEA's portion of the SJRPP Units, as
8 stated above. Additionally, FPL purchases energy and capacity from
9 Qualifying Facilities under existing tariffs and contracts.

10

11 **Q. Please provide the projected energy costs to be recovered through**
12 **the Fuel Cost Recovery Clause for the power purchases referred**
13 **to above during the October, 1996 through March, 1997 period.**

14 A. Under the UPS agreement FPL's capacity entitlement during the
15 projected period is 920 MW from October, 1996 through March, 1997.
16 Based upon the alternate and supplemental energy provisions of UPS,
17 an availability factor of 100% is applied to these capacity entitlements
18 to project energy purchases. The projected UPS energy (unit) cost for
19 this period, used as input to POWRSYM, is based on data provided
20 by the Southern Companies. For the period, FPL projects the purchase
21 of 690,143 MWH of UPS Energy at a cost of \$12,885,410. In

1 addition, we project the purchase of 1,644,465 MWH of UPS
2 Replacement energy (Schedule R) at a cost of \$25,886,870. The total
3 UPS Energy plus Schedule R projections are presented on Schedule
4 E7 of Appendix II.

5
6 Energy purchases from the JEA-owned portion of the St. Johns River
7 Power Park generation are projected to be 1,374,901 MWH for the
8 period at an energy cost of \$21,424,670. FPL's cost for energy
9 purchases under the St. Lucie Plant Reliability Exchange Agreements
10 is a function of the operation of St. Lucie Unit 2 and the fuel costs to
11 the owners. For the period, we project purchases of 261,211 MWH
12 at a cost of \$1,101,000. These projections are shown on Schedule E7
13 of Appendix II.

14
15 In addition, as shown on Schedule E8 of Appendix II, we project that
16 purchases from Qualifying Facilities for the period will provide
17 2,968,817 MWH at a cost to FPL of \$56,346,004.

18
19 **Q. How were energy costs related to purchases from Qualifying**
20 **Facilities developed?**

21 **A. For those contracts that entitle FPL to purchase "as-available" energy**

1 we used FPL's fuel price forecasts as inputs to the POWRSYM model
2 to project FPL's avoided energy cost that is used to set the price of
3 these energy purchases each month. For those contracts that enable
4 FPL to purchase firm capacity and energy, the applicable Unit Energy
5 Cost mechanism prescribed in the contract is used to project monthly
6 energy costs.

7

8 **Q. Have you projected Schedule A/AF - Emergency Interchange**
9 **Transactions?**

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

12

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

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

18

19

20 **Q. Please describe the method used to forecast the Economy**
21 **Transactions.**

- 1 A. The quantity of economy sales and purchase transactions are projected
2 based upon historic transaction levels, corrected to remove non-
3 recurring factors.
4
- 5 **Q. What are the forecasted amounts and costs of Economy energy**
6 **sales?**
- 7 A. We have projected 213,608 MWH of Economy energy sales for the
8 period. The projected fuel cost related to these sales is \$5,815,199.
9 The projected transaction revenue from the sales is \$7,494,441. Eighty
10 percent of the gain for Schedule C is \$1,343,394 and is credited to
11 our customers.
12
- 13 **Q. In what document are the fuel costs of economy energy sales**
14 **transactions reported?**
- 15 A. Schedule E6 of Appendix II provides the total MWH of energy and
16 total dollars for fuel adjustment. The 80% of gain is also provided on
17 Schedule E6 of Appendix II.
18
- 19 **Q. What are the forecasted amounts and costs of Economy energy**
20 **purchases for the October, 1996 to March, 1997 period?**
- 21 A. The costs of these purchases are shown on Schedule E9 of Appendix

1 II. For the period FPL projects it will purchase a total of 1,963,659
2 MWH at a cost of \$37,186,920. If generated, we estimate that this
3 energy would cost \$41,496,176. Therefore, these purchases are
4 projected to result in savings of \$4,309,256.

5
6 **Q. What are the forecasted amounts and cost of energy being sold
7 under the St. Lucie Plant Reliability Exchange Agreement?**

8 A. We project the sale of 261,225 MWH of energy at a cost of
9 \$1,007,000. These projections are shown on Schedule E6 of Appendix
10 II.

11
12 **Q. Would you please summarize your testimony?**

13 A. Yes. In my testimony I have presented FPL's fuel price projections
14 for the fuel cost recovery period of October, 1996 through March,
15 1997. In addition, I have presented FPL's projections for generating
16 unit heat rates and availabilities, and the quantities and costs of
17 interchange and other power transactions for the same period. These
18 projections were based on the best information available to FPL, and
19 were used as inputs to POWRSYM in developing the projected Fuel
20 Cost Recovery Factor for the October, 1996 through March, 1997
21 period.

1

2 Q. Does this conclude your testimony?

3 A. Yes, it does.

4

5

6

BEFORE THE PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF R. SILVA

DOCKET NO. 960001-EI

JUNE 24, 1996

- 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, 1996 through September, 1997, for use in determining
17 the Generating Performance Incentive Factor (GPIF). The
18 improvement and degradation range for each performance indicator is
19 also presented in this testimony.

1 Q. Has the Company made any changes to the Generating Performance
2 Incentive Factor being proposed ?

3 A. Yes, we have. The Company is proposing that the Generating
4 Performance Incentive Factor be filed on an annual basis instead of the
5 current six-month period filing. The amount of paperwork produced,
6 filed and processed will be greatly reduced as a result of this effort.

7

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

11 A. FPL projects a weighted system equivalent planned outage factor of
12 5.6% and a weighted system equivalent unplanned outage factor of
13 12.4% which yield a weighted system equivalent availability of 82.0%.
14 This target includes the refueling of two nuclear units during the
15 October, 1996 through September, 1997 period. FPL also projects a
16 weighted system average net operating heat rate of 9762 BTU/KWH.
17 As discussed in later in this testimony, these targets represent fair and
18 reasonable values when compared to historical data . I therefore ask
19 that the targets for these performance indicators and the respective
20 improvement/degradation ranges in my testimony be approved by the
21 Commission for FPL.

22

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

1 A. Yes, I have. It consists of one document. The first page of this
2 document is an index to the contents of the document. All other pages
3 are numbered according to the latest revisions of the GPIF Manual as
4 approved by the Commission.
5

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

8 A. Yes, I have. Document No. 1, pages 6 and 7 contain the information
9 summarizing the targets and ranges for unit equivalent availability and
10 average net operating heat rates for the sixteen (16) generating units
11 which FPL proposes to have considered. These sheets were prepared in
12 accordance with the latest revisions of the GPIF Manual, except that,
13 for consistency with previous GPIF filings, it is necessary to divide the
14 format of Sheet 3.505 of the GPIF Manual into two sheets. All of these
15 targets have been derived utilizing methodologies as adopted in Section
16 4, Subsection 2.3 of the GPIF Manual.
17

18 Q. Please summarize FPL's methodology for determining equivalent
19 availability targets?

20 A. The GPIF Manual requires that the equivalent availability target for
21 each unit be determined as the difference between 100% and the sum
22 of the Planned Outage Factor (POF) and the Unplanned Outage Factor
23 (UOF). The POF for each unit is determined by the length of the
24 planned outage during the projected period. The GPIF Manual also
25 requires that the sum of the most recent twelve month ending average

- 1 A. The sixteen (16) units which FPL proposes to use represent the top
2 80.48% of the forecast system net generation for the October, 1996
3 through September, 1997 period. These units were selected in
4 accordance with the GPIF Manual Section 3.1 using the estimated net
5 generation for each unit taken from the production costing simulation
6 program, POWRSYM, which forms the basis for the projected
7 levelized fuel cost recovery factor for the period.
- 8
- 9 Q. Mr. Silva, from the heat rate targets and equivalent availability range
10 projections, do FPL's generation performance targets represent a
11 reasonable level of efficiency?
- 12 A. Yes. To fully appreciate why these targets are reasonable, and in some
13 cases ambitious, it would be necessary to discuss the development of
14 both the heat rate and availability targets for each of the sixteen (16)
15 units in the GPIF. However, a less rigorous approach of comparing
16 weighted system values of these targets to actual values for prior
17 periods will provide a valuable insight into the appropriateness of the
18 targets.
- 19 Q. Does this conclude your testimony?
- 20 A. Yes, it does.

1 Q (By Mr. Childs) Mr. Silva, would you please
2 summarize your testimony.

3 A Yes, sir. The purpose of my testimony
4 related to Issue 11a, which includes the documents I'm
5 sponsoring, is to put in the proper perspective the
6 nuclear outages of St. Lucie 1 during August and
7 September of 1995.

8 In my testimony I, one, explain the effect
9 on the calculation of the generating performance
10 incentive factor, GPIF, rewards and penalties through
11 the April through September of '95 period of the
12 shutdowns of St. Lucie Unit 1 during August and
13 September of 1995, and the outage that occurred on
14 July 10, 1995.

15 My testimony also compares the performance
16 of St. Lucie 1 and FPL's other nuclear units to the
17 GPIF targets for the period in which these outages
18 occurred as well as the availability of the plants in
19 the nuclear industry in general.

20 The plant outage at St. Lucie 1 during
21 August and September 1995 which followed the shutdown
22 caused by Hurricane Erin have resulted in a GPIF
23 equivalent availability factor net penalty to FPL of
24 \$2.6 million during the April through September 1995
25 period. That has already been incurred by FPL.

1 Regarding the other outage, the 34-hour
2 outage of St. Lucie 1 on July 10, 1995, due to the
3 vehicle lodged in the discharge canal, these off-line
4 hours that the plant experienced have already been
5 authorized by the Commission for elimination from the
6 GPIF reward/penalty calculation, consistent with the
7 GPIF rule and the manual since all parties stipulated
8 at a prior hearing that that outage was externally
9 cause; meaning it was not the fault of or caused by
10 FPL.

11 Now regarding the performance of FPL's
12 nuclear units, it should be noted that for the first
13 four months of the period of April through
14 September -- in other words, the months of April
15 through July of 1995, the availability of St. Lucie
16 Unit 1 was 97%, or about 3.4% higher than that unit's
17 GPIF availability target, which was 93.6%.

18 For the six-month period -- and I might add
19 that for the six-month period St. Lucie 1 operated
20 with an availability that was equal to the industry
21 average for 1995 inspite of the outages in August and
22 September.

23 Concerning the other nuclear units, the
24 average availability of those other nuclear units for
25 the entire April through September '95 period was 93%

1 availability, which is 5.8% higher than their GPIF
2 target, which had been 87.2. In fact, during the last
3 three years the availability of St. Lucie 1 has been
4 9.3% higher than that of the industry average.

5 Now, one effect of that higher availability
6 is that a savings of \$33.5 million to the customers
7 over that period. Now, what I mean by a savings is
8 that if the unit had operated at the industry average
9 the cost to the customer would have been \$33.5 million
10 higher. But by operating so much better than average
11 this savings was realized.

12 The other effect of operating so effectively
13 over the last three years is that the St. Lucie 1
14 performance targets and GPIF have been elevated each
15 year. It was 73% availability in 1991 to 77% in '93,
16 growing up to 93% in 1995. So the target keeps
17 getting tougher to meet. And if we had not improved,
18 if we had not improved our performance and, therefore,
19 raised the target each year, the replacement fuel cost
20 calculated at a 73% availability would have been zero.
21 Because that's essentially what we achieved in that
22 period.

23 Now, the effective operation of nuclear
24 units is not limited to St. Lucie 1. FPL's nuclear
25 availability for 1995, all four plants, was 83.6%. It

1 was only 75.7% for the industry. Again, if we apply
2 the difference and say if our units that operated at
3 the industry average, then we calculate that the
4 customer would have paid \$32.5 million more in 1995 as
5 a result. So we've operated our plants much better
6 than average recently and for a number of years to the
7 benefit of our customers.

8 These comparisons show that because of
9 effective management and work implementation,
10 St. Lucie 1 performance has been significantly better
11 than the nuclear industry average. And in the case of
12 the outages at St. Lucie 1 during August then
13 September of '95, FPL has already received the GPIF
14 penalty as intended by the Commission. Any other
15 penalty or disallowance for outages over such a short
16 period of time, which ignore St. Lucie 1's excellent
17 performance over one, two, three years would be
18 inappropriate.

19 This concludes my summary.

20 **MR. CHILDS:** Tender Mr. Silva for cross.

21 **MS. KAUFMAN:** No.

22 **COMMISSIONER DEASON:** Staff?
23
24
25

1 MS. JOHNSON: I do have a couple.

2 CROSS EXAMINATION

3 BY MS. JOHNSON:

4 Q Mr. Silva, you refer to Order No. 10168 in
5 your testimony on Page 3, correct?

6 A Correct?

7 A Yes.

8 Q And you indicate that the Commission has
9 recognized adjustments to GPIF for externally caused
10 events, correct?

11 A Yes.

12 Q Is there any reference in that order to the
13 fact that an externally caused event may necessarily
14 not involve management imprudence? Let me restate
15 that.

16 Is there any reference in the Order 10168
17 that would preclude a disallowance of replacement
18 energy costs for outages due to externally caused
19 events?

20 A Not to my knowledge. But I would submit
21 that that question is almost moot in the sense the
22 GPIF is intended to reward and penalize a utility for
23 better or worse than target performance. The
24 GPIF rule established by the Commission sets aside
25 some events that it recognizes as being externally

1 caused, to be removed from the calculation of rewards
2 and penalties. In essence that says to me that the
3 Commission recognizes these externally caused events,
4 among which, for example, is Hurricane Erin causing
5 the required shutdown of the unit for a few days.
6 That when the externally caused events occur, it's not
7 the fault or the responsibility of the company.
8 Therefore, those that are agreed upon are externally
9 caused events are removed from the calculation, and,
10 therefore from any other penalty that the Company
11 might incur. The only question is whether we agree
12 that an event is externally caused, i.e. not the fault
13 of the company.

14 And what the order does say is that this is
15 an externally caused event, and the implication to me
16 is, therefore, not the fault of the Company, so no
17 penalty should be applied to the Company as a result.

18 Q But the order does not speak to the fact
19 that any outages resulting from an externally caused
20 event would necessarily prevent the Commission from
21 disallowing replacement energy costs; yes or no?

22 A The order does not say that and it was never
23 asked to address that issue.

24 Q If FPL had kept the gate locked rather than
25 leaving it in its open position, would the event have

1 not occurred?

2 A I don't know.

3 MS. JOHNSON: Staff has no further
4 questions.

5 COMMISSIONER DEASON: Redirect.

6 MR. CHILDS: I have no redirect.

7 COMMISSIONER DEASON: Exhibits.

8 MR. CHILDS: Yes. I would like to move into
9 evidence Exhibit 1, 2, 3 and 4.

10 COMMISSIONER DEASON: Without objections
11 exhibition 1, 2, 3 and 4 are admitted.

12 (Exhibits 1, 2, 3 and 4 received in
13 evidence.)

14 MR. CHILDS: Call Ms. Morley. We're now
15 moving to Issue 11b. I would call to the Commission's
16 attention that the testimony that Ms. Morely is
17 sponsoring as to this issue -- Ms. Morely has adopted
18 the testimony of Mr. Birkett who was FPL's witness
19 when the testimony was originally filed. So she is
20 now adopting his testimony. His prefiled testimony
21 dated June 24, 1996, addresses this subject at Page 6,
22 I believe, beginning at Line 11, continuing through
23 Line 2 of Page 8. This testimony was adopted by
24 Ms. Morley's prefiled testimony dated 7-30-96. So
25 when I refer to the testimony I'm going to be

1 referring to both of those sets, Commissioners.

2 COMMISSIONER DEASON: Very well.

3

- - - - -

4

ROSEMARY MORLEY

5 was called as a witness on behalf of Florida Power &
6 Light Company and, having been duly sworn, testified
7 as follows:

8

DIRECT EXAMINATION

9

BY MR. CHILDS:

10

Q Would you be state your name and address?

11

A Rosemary Morely, 9250 West Flagler, Miami,

12

Florida 33174.

13

Q By whom are you employed and in what

14

capacity?

15

A By Florida Power and Light. I'm the Manager

16

of Rates and Tariff Administration.

17

Q Do you have before you a document which is

18

the supplemental testimony of Rosemary Morely in this

19

docket 960001-EI?

20

A Yes, I do.

21

Q Which adopts the testimony of Mr. Birkett?

22

A Yes, I do.

23

Q Do you have any changes or corrections to

24

make to that testimony?

25

A I would like to make a change to the

1 testimony of Barry T. Birkett in Docket 960001-EI,
2 filed on June 24th, which I adopted as my own on July
3 30th.

4 The change I would like to make is on
5 Page 7, Line 7, and I would like to replace the word
6 "depreciation" with "amortization".

7 The word "depreciation" is appropriately
8 used in referring to capital projects; the cost of the
9 thermal uprate is being recorded as an O&M item.
10 Therefore, "amortization" is the more appropriate
11 term.

12 Q With that change do you adopt this as your
13 testimony?

14 A Yes, I do.

15 MR. CHILDS: We ask that the prepared
16 testimony of Mr. Morely that I've identified, which
17 incorporates Mr. Birkett's prepared testimony, be
18 inserted into the record as though read.

19 COMMISSIONER DEASON: Without objection it
20 will be so inserted.

21 MR. CHILDS: I believe that the documents
22 that are being sponsored -- I'm not sure, there are no
23 documents on this issue; is that correct?

24 WITNESS MORLEY: That's correct.
25

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
FLORIDA POWER & LIGHT COMPANY
SUPPLEMENTAL TESTIMONY OF ROSEMARY MORLEY

DOCKET NO. 960001-EI

July 30, 1996

1 Q. Please state your name and address.

2 A. My name is Rosemary Morley and my business address is 9250
3 West 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 acting Manager of Rates and Tariff Administration, taking the place
8 of Barry T. Birkett.

9

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

12 A. I received a Bachelor of Arts degree with honors in Economics from
13 the University of Maryland in 1979 and a Master of Arts degree in
14 Economics from Northwestern University in 1981. I joined FPL in
15 1983 as an analyst in the Load Forecasting Group. After holding
16 positions of increasing responsibility in various forecasting and
17 planning functions, I joined the Rate Department as a Senior Cost
18 of Service Analyst in 1987. Since that time, I have held various

1 positions in the department including Supervisor of Cost of Service
2 Studies (1990-1993), Principal Rate Analyst (1993-1996) and Rate
3 Development Manager (1996).

4

5 **Q. What are your responsibilities and duties as acting Manager of**
6 **Rates and Tariff Administration?**

7 **A. I am responsible for FPL's retail and wholesale rates and cost of**
8 **service activities. In addition, I will sponsor rate related testimony**
9 **in dockets before the Florida Public Service Commission and the**
10 **Federal Energy Regulatory Commission (FERC).**

11

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

13 **A. The purpose of my testimony is to adopt Mr. Birkett's testimony and**
14 **supporting schedules/exhibits found in Docket No. 960001-EI,**
15 **Levelized Fuel Cost Recovery and Capacity Cost Recovery Final**
16 **True-Up and Projections filed with the Commission on May 20,**
17 **1996 and June 24, 1996, respectively. I have independently**
18 **reviewed Mr. Birkett's testimony and supporting schedules/exhibits**
19 **and adopt them as my own.**

20

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

22 **A. Yes, it does.**

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
FLORIDA POWER & LIGHT COMPANY
SUPPLEMENTAL TESTIMONY OF ROSEMARY MORLEY
DOCKET NO. 960001-EI

August 20, 1996

1 Q. Please state your name and address.

2 A. My name is Rosemary Morley and my business address is 9250
3 West 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 acting Manager of Rates and Tariff Administration, taking the place
8 of Barry T. Birkett who has left FPL.

9

10 Q. Have you previously testified in this docket?

11 A. Yes, I have.

12

13 Q. What is the purpose of your testimony?

14 A. The purpose of my testimony is to revise the estimated/actual true-
15 up amount for April 1996 through September 1996 by including
16 actual data for June and July 1996. I have provided revised fuel
17 factors for the Company's rate schedules for the period October
18 1996 through September 1997. These revised factors are to

1 replace those filed by Barry T. Birkett on June 24, 1996 and
2 adopted by me on July 30, 1996.

3

4 **Q. Have you prepared any schedules that reflect these revisions?**

5 **A.** Yes. Attachment I contains the Fuel Cost Recovery schedules that
6 reflect these revisions and Attachment II contains Commission A-
7 Schedules for June and July 1996.

8

9 **Q. Please explain the reasons for these revisions.**

10 **A.** The variance for June 1996 is \$23 million. This variance is due
11 primarily to a \$14.8 million increase in Jurisdictional Fuel Costs and
12 a \$8.1 million decrease in Jurisdictional Fuel Revenues (see
13 Attachment I, Page 3). The increase in Total Jurisdictional Fuel
14 Costs is primarily due to higher than projected use of heavy oil.
15 Heavy oil generation was 81.4% higher than projected. This
16 increase was caused by lower than projected generation from
17 nuclear (33.1%), natural gas (5%) and coal (7%) (see Schedule A3
18 for the month of June 1996 provided in Attachment II). The
19 decrease in Jurisdictional Fuel Revenues is due to an error in the
20 calculation of estimated revenues for June. The mid-course
21 correction factor for July 1996 was inadvertently used in this
22 calculation.

23

24 The variance for July 1996 is \$37 million. This variance is primarily

1 due to a 4.3% higher than projected Net Energy For Load causing
2 more heavy oil to be burned (\$20.9 million), more purchased power
3 to be utilized (\$6.8 million) and less power sold (\$6.7 million) (see
4 Attachment I, Page 4). The unit cost of heavy oil was \$.27 per
5 barrel lower than projected which slightly offset the heavy oil
6 variance. Gas prices were \$.50 per MCF higher than projected
7 resulting in a \$10.6 million variance that was offset by \$1.1 million
8 because less gas than projected was used (see Schedule A3 for
9 the month of July 1996 provided in Attachment II).

10

11 **Q. What is the total underrecovery included in the fuel factors for**
12 **the period October 1996 through September 1997?**

13 **A.** In the June 24, 1996 filing, FPL included a final true-up amount of
14 \$17,175,052 for the period October 1995 through March 1996 and
15 an estimated/actual true-up amount of \$88,480,000 for the period
16 April 1996 through September 1996. This \$88,480,000
17 estimated/actual true-up amount was based on two months of
18 actual data for April and May 1996 and four months of revised
19 estimates for June through September 1996.

20

21 FPL now proposes to revise this estimated/actual true-up amount
22 to include an additional \$60,555,547 underrecovery to reflect actual
23 data for June and July 1996, therefore using four months of actual
24 data for April through July 1996 and two months of estimated data

1 for August and September 1996. This results in an
2 estimated/actual true-up amount, including interest of \$149,035,547.
3 This estimated/actual underrecovery of \$149,035,547 for the April
4 through September 1996 plus the final true-up underrecovery of
5 \$17,157,052 for the October 1995 through September 1996 period
6 results in a total underrecovery of \$166,192,598 to be recovered in
7 the October 1996 through September 1997 period (Attachment I,
8 Pages 7 and 8).

9
10 **Q. What is the proposed revised levelized fuel factor for which the**
11 **Company requests approval?**

12 **A.** The proposed six-month levelized fuel factor is 2.204 ¢ per kWh, as
13 shown on Schedule E1 (Attachment I, Page 5). Time of Use
14 factors are provided on Schedule E1-D (Attachment I, Page 9) and
15 Fuel Factors by Rate Class are provided on Schedule E1-E
16 (Attachment I, Page 10).

17
18 **Q. What will be the charge for a Residential customer using 1,000**
19 **kWh effective October 1996?**

20 **A.** The total residential bill, excluding taxes and franchise fees, for
21 1,000 kWh will be \$78.82. The base bill for 1,000 kWh is \$47.46,
22 the Fuel Cost Recovery charge from Schedule E1-E (Attachment I,
23 Page 10) for a residential customer is \$22.09, the Conservation
24 charge is \$2.09, the Capacity Cost Recovery charge is \$6.21, the

1 Environmental Cost Recovery charge is \$.17 and the Gross
2 Receipts Tax is \$.80. A Residential Bill Comparison (1,000 kWh)
3 is presented in Schedule E10 (Attachment I, Page 11).

4

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

6 **A. Yes, it does.**

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF B.T. BIRKETT

DOCKET NO. 960001-EI

May 20, 1996

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

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

7

8 Q. Have you previously testified in this docket?

9 A. Yes, I have.

10

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

12 A. The purpose of my testimony is to present the schedules necessary
13 to support the actual Fuel Cost Recovery Clause (FCR) and Capacity
14 Cost Recovery Clause (CCR) Net True-Up amounts for the period
15 October 1995 through March 1996. The Net True-Up for FCR is an

1 underrecovery, including interest, of \$17,157,052. The Net True-Up
2 for CCR is an overrecovery, including interest, of \$28,927,083. I am
3 requesting Commission approval to include these true-up amounts in
4 the calculation of the FCR and CCR factors respectively, for the period
5 October 1996 through March 1997.

6

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

9 A. Yes, I have. It consists of two appendices. Appendix I contains the
10 FCR related schedules and Appendix II contains the CCR related
11 schedules. FCR Schedules A-1 through A-13 for the October 1995
12 through March 1996 period have been filed monthly with the
13 Commission, are served on all parties and are incorporated herein by
14 reference.

15

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

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

23

24

FUEL COST RECOVERY CLAUSE (FCR)

1

2

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

4 **A.** Appendix I, page 3, entitled "Summary of Net True-Up", shows the
5 calculation of the Net True-Up for the six-month period October 1995
6 through March 1996, an underrecovery of \$17,157,052, which I am
7 requesting be included in the calculation of the Fuel Cost Recovery
8 Factor for the period October 1996 through March 1997. The
9 calculation of the true-up amount for the period follows the procedures
10 established by this Commission as set forth on Commission Schedule
11 A-2 "Calculation of True-Up and Interest Provision".

12

13 The actual End-of-Period underrecovery for the six-month period
14 October 1995 through March 1996 of \$81,698,246 shown on line 1,
15 less the estimated/actual End-of-Period underrecovery for the same
16 period of \$64,536,189 shown on line 2 that was included in the
17 calculation of the Fuel Cost Recovery Factor for the period April 1996
18 through September 1996, adjusted to reflect Oil Backout (OBO)
19 Revenues resulting from back billings shown on line 3, results in the
20 Net True-Up for the six-month period October 1995 through March
21 1996 shown on line 4, an underrecovery of \$17,157,052.

22

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

1 A. Yes. Appendix I, page 4, entitled "Calculation of Final True-up
2 Variances", shows the actual fuel costs and revenues compared to the
3 estimated/actuals for the period October 1995 through March 1996.

4
5 **Q. What was the variance in fuel costs?**

6 A. As shown on Appendix I, page 4, line A7, actual fuel costs on a Total
7 Company basis were \$33.2 million higher than the estimated/actual
8 projection. This variance is primarily due to a \$57.0 million increase
9 in the Fuel Cost of System Net Generation, offset by a \$15.6 million
10 increase in the Fuel Cost of Power Sold, a \$3.3 million decrease the
11 Fuel Cost of Purchased Power and a \$5.1 million decrease in the
12 Energy Cost of Economy Purchases. The increase in the Fuel Cost
13 of System Net Generation was primarily due to an 8.3% increase in
14 heavy oil prices resulting from higher than projected crude oil prices
15 reflecting a colder than normal winter and extremely low crude oil
16 inventory levels. The increase in the Fuel Cost of Power Sold was
17 due to higher than projected demand (524,000 MWH) due to colder
18 than normal weather throughout the Southeast region. The decrease
19 in the Fuel Cost of Purchased Power was due to lower than projected
20 purchases from Southern Company due to colder than normal weather
21 throughout the Southeast region. The decrease in the Energy Cost of
22 Economy Purchases was due to the unavailability of low cost economy
23 energy due to colder than normal weather throughout the Southeast
24 region.

1

2 Q. What was the variance in retail (jurisdictional) Fuel Cost
3 Recovery revenues?

4 A. As shown on line D1, actual jurisdictional Fuel Cost Recovery
5 revenues, net of revenue taxes, were \$14.9 million higher than the
6 estimated/actual projection. This increase was due to higher
7 jurisdictional kWh sales. Jurisdictional sales were 836,242,704 kWh
8 (2.3%) higher than the estimated/actual projection.

9

10 Q. How is Real Time Pricing (RTP) reflected in the calculation of the
11 Net True-up Amount?

12 A. In the determination of Jurisdictional kWh sales, only kWh sales
13 associated with RTP baseline load are included, consistent with
14 projections (Appendix 1, page 4, Line C3). In the determination of
15 Jurisdictional Fuel Costs, revenues associated with RTP incremental
16 kWh sales are included as 100% Retail (Appendix 1, page 4, Line
17 D4c) in order to offset incremental fuel used to generate these kWh
18 sales.

19

20

21

CAPACITY COST RECOVERY CLAUSE (CCR)

22

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

24 A. Appendix II, page 3, entitled "Summary of Net True-Up Amount" shows

1 the calculation of the Net True-Up for the six-month period October
2 1995 through March 1996, an overrecovery of \$28,927,083, which I
3 am requesting to be included in the next projection period.

4
5 The actual End-of-Period overrecovery for the six-month period
6 October 1995 through March 1996 of \$67,886,374, shown on line 1
7 less the estimated/actual End-of-Period overrecovery for the same
8 period of \$38,959,291, shown on line 2 that was included in the
9 Capacity Cost Recovery Factor for the period April 1996 through
10 September 1996, results in the Net True-Up for the six-month period
11 October 1995 through March 1996 shown on line 3, an overrecovery
12 of \$28,927,083.

13
14 **Q. Have you provided a schedule showing the calculation of the**
15 **End-of-Period true-up?**

16 **A.** Yes. Appendix II, page 4, entitled "Calculation of Final True-up
17 Amount", shows the calculation of the CCR End-of period true-up for
18 the six-month period October 1995 through March 1996. The End of-
19 Period true-up shown on line 14 plus line 15 is an overrecovery of
20 \$67,886,374.

21
22 **Q. Is this true-up calculation consistent with the true-up**
23 **methodology used for the other cost recovery clauses?**

24 **A.** Yes it is. The calculation of the true-up amount follows the procedures

1 established by this Commission as set forth on Commission Schedule
2 A-2 "Calculation of True-Up and Interest Provision" for the Fuel Cost
3 Recovery Clause.

4

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

6 A. Appendix II, page 5, entitled "Calculation of Interest Provision", shows
7 the calculation of the interest provision for the period October 1995
8 through March 1996 and follows the same methodology used in
9 calculating the interest provision for the other cost recovery clauses,
10 as previously approved by this Commission.

11

12 The interest provision is the result of multiplying the monthly average
13 true-up (line 4) by the monthly average interest rate (line 9). The
14 average interest rate is developed using the 30 day commercial paper
15 rate as published in the Wall Street Journal on the first business day
16 of the current and subsequent months. The interest calculated during
17 the period amounts to \$1,833,888 as shown on line 10.

18

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

21 A. Yes. Appendix II, page 6, entitled "Calculation of Final True-up
22 Variances", shows the actual capacity charges and applicable
23 revenues compared to the estimated/actuals for the period October
24 1995 through March 1996.

1

2 **Q. What was the variance in net capacity charges?**

3 A. As shown on line 6, actual net capacity charges on a Total Company
4 basis were \$12.0 million lower than the estimated/actual projection.
5 This variance was primarily due to lower than expected capacity
6 payments to the Southern Company for Unit Power Sales (UPS),
7 lower than expected capacity payments to Qualifying Facilities (QF's)
8 and higher than expected Revenues from Capacity Sales. Actual UPS
9 capacity charges were \$6.9 million lower than projected primarily due
10 to a prior period credit adjustment of \$6.2 million reflected on the
11 February and March invoices. Actual QF capacity charges were \$3.0
12 million lower than projected primarily due to the fact that the
13 Indiantown Cogeneration Limited (ICL) contract was not eligible for
14 capacity payments until mid-December. Revenues from Capacity
15 Sales were \$1.3 million higher than projected due to higher than
16 projected Opportunity Sales as a result of the cold weather throughout
17 the Southeast.

18

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

20 A. As shown on line 13, actual Capacity Cost Recovery revenues, net of
21 revenue taxes, were \$17.1 million higher than the estimated/actual
22 projection. This increase was primarily due to higher jurisdictional
23 kWh sales than projected. Jurisdictional sales were 836,242,704 kWh
24 (2.3%) higher than estimated/actual projection

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

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF BARRY T. BIRKETT

DOCKET NO. 960001-EI

June 24, 1996

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 for the Company's rate schedules for the
15 period October 1996 through March 1997 and the capacity payment
16 factors for the Company's rate schedules for the period October 1996
17 through September 1997. The calculation of the fuel factors is based
18 on projected fuel cost and operational data as set forth in Commission

1 Schedules E1 through E10, H1 and other exhibits filed in this
2 proceeding and data previously approved by the Commission.

3
4 In addition, my testimony presents the schedules necessary to support
5 the calculation of the Estimated/Actual True-up amounts for the Fuel
6 Cost Recovery Clause (FCR) and the Capacity Cost Recovery
7 Clause(CCR) for the period April 1996 through September 1996.

8

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

11 A. Yes, I have. It consists of various schedules included in Appendices
12 II and III. Appendix II contains the FCR related schedules and
13 Appendix III contains the CCR related schedules.

14

15 FCR Schedules A-1 through A-13 for April 1996 and May 1996 have
16 been filed monthly with the Commission, are served on all parties and
17 are incorporated herein by reference.

18

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

21 A. Unless otherwise indicated, the actual data is taken from the books
22 and records of FPL. The books and records are kept in the regular
23 course of our business in accordance with generally accepted
24 accounting principles and practices and provisions of the Uniform

1 System of Accounts as prescribed by this Commission.

2

3

FUEL COST RECOVERY CLAUSE

4

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

7 A. 2.037¢ per kWh. Schedule E1, Page 3 of Appendix II shows the
8 calculation of this six-month levelized fuel factor. Schedule E2, Page
9 10 of Appendix II indicates the monthly fuel factors for October 1996
10 through March 1997 and also the six-month levelized fuel factor for the
11 period.

12

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

15 A. Yes. Schedule E1-D, Page 8 of Appendix II provides a six-month
16 levelized fuel factor of 2.174¢ per kWh on-peak and 1.984¢ per kWh
17 off-peak for our Time of Use rate schedules.

18

19 **Q. Were these calculations made in accordance with the procedures**
20 **previously approved in this Docket?**

21 A. Yes, they were.

22

23 **Q. What adjustments are included in the calculation of the six-**
24 **month levelized fuel factor shown on Schedule E1, Page 3 of**

1 **Appendix II?**

2 A. As shown on line 29 of Schedule E1, Page 3, of Appendix II the
3 estimated/actual fuel cost underrecovery for the April 1996 through
4 September 1996 period amounts to \$88,480,000. This
5 estimated/actual underrecovery for the April 1996 through September
6 1996 period plus the final underrecovery of \$17,157,052 for the
7 October 1995 through March 1996 period results in a total
8 underrecovery of \$105,637,052. This amount, divided by the
9 projected retail sales of 36,766,446 MWH for October 1996 through
10 March 1997 results in an increase of .2873¢ per kWh before
11 applicable revenue taxes. In his testimony for the Generating
12 Performance Incentive Factor, FPL Witness R. Silva calculated a
13 reward of \$1,980,538 for the period ending March 1996, to be applied
14 to the October 1996 through March 1997 period. This \$1,980,538
15 divided by the projected retail sales of 36,766,446 MWH during the
16 projected period, results in an increase of .0054¢ per kWh, as shown
17 on line 33 of Schedule E1, Page 3 of Appendix II.

18

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

21 A. Schedule E1-B, Page 5 of Appendix II shows the calculation of the
22 FCR Estimated/Actual True-up amount. The calculation of the
23 estimated/actual true-up amount for the period April 1996 through
24 September 1996 is an underrecovery, including interest, of

1 \$88,480,000 (Column 7, lines C7 plus C8). This amount, when
2 combined with the Final True-up underrecovery of \$17,157,052
3 (Column 7, line C9a) deferred from the period October 1995 through
4 March 1996, presented in my Final True-up testimony filed on May 20,
5 1996, results in the End of Period underrecovery of \$105,637,052
6 (Column 7, line C11).

7

8 This schedule also provides a summary of the Fuel and Net Power
9 Transactions (lines A1 through A7), kWh Sales (lines B1 through B3),
10 Jurisdictional Fuel Revenues (line C1 through C3), the True-up and
11 Interest calculation (lines C4 through C10) for this period, and the End
12 of Period True-up amount (line C11).

13

14 The data for April 1996 and May 1996, columns (1) and (2) reflects the
15 actual results of operations and the data for June 1996 through
16 September 1996, columns (3) through (6), are based on updated
17 estimates.

18

19 The variance calculation of the Estimated/Actual data compared to the
20 original projections for the April 1996 through September 1996 period
21 is provided in Schedule E1-B-1, Page 6 of Appendix II.

22

23 As shown on line A5, the variance in Total Fuel Costs and Net Power
24 Transactions is \$108.1 million or a 14.5% increase. This variance is

1 mainly due to a 22.6% increase in Fuel Cost of System Net
2 Generation as shown on line A1a. This increase is primarily due to
3 increases in natural gas and heavy oil prices reflecting the impacts of
4 a colder than normal winter and extremely low crude oil and natural
5 gas levels.

6
7 The true-up calculations follow the procedures established by this
8 Commission as set forth on Commission Schedule A2 "Calculation of
9 True-Up and Interest Provision" filed monthly with the Commission.

10

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

13 A. Yes. FPL is requesting that costs associated with two issues be
14 recovered through the Fuel Cost Recovery Clause.

15

16 **Q. Please explain the first issue that FPL is requesting to be**
17 **recovered through the Fuel Recovery Clause.**

18 A. FPL is requesting recovery of the costs associated with the thermal
19 power uprate of Turkey Point Units 3 and 4. As discussed in the
20 testimony of Claude Villard, the thermal power uprate of each nuclear
21 unit, from 2200 megawatts thermal to 2300 megawatts thermal, will
22 increase the output of each nuclear unit by approximately 31
23 megawatts electric. The units are expected to increase power by
24 January 1997. As Mr. Villard testifies, the cost of this thermal power

1 uprate project is estimated at \$10 million.

2

3 The Company has estimated that this uprating will yield fuel savings
4 on a net present value basis in excess of \$88 million. From January
5 1997 through December 1998, the fuel savings are projected to
6 exceed the cost of this project, therefore, FPL is requesting that it
7 recover the ~~depreciation~~^{amortization} and return on investment in this thermal
8 power uprate project over this two year period. FPL has included
9 \$1,463,620 in the projected recovery factor for the upcoming period.

10

11 **Q. What is the basis for requesting recovery of this thermal uprate**
12 **project through the Fuel Cost Recovery Clause?**

13 A. The Commission in Docket No. 850001-EI-B, Order No. 14546 issued
14 on July 8, 1985 stated, regarding the charges appropriately included
15 in the calculation of fuel "Fossil fuel-related costs normally recovered
16 through base rates but which were not recognized or anticipated in the
17 cost levels used to determine current base rates and which, if
18 expended, will result in fuel savings to customers. Recovery of such
19 costs should be made on a case by case basis after Commission
20 approval".

21

22 This expenditure will result in significant fuel savings for FPL's
23 customers and appears to be the type of a cost which the Commission
24 contemplated being recovered through the clause. For these reasons,

1 FPL believes that it is appropriate to bring this issue forward for
2 Commission consideration and approval.

3

4 **Q. Please explain the second issue that FPL is requesting to be**
5 **recovered through the Fuel Recovery Clause.**

6 A. A Petition was filed on February 15, 1996 under Docket No. 960182-
7 EQ whereby, if approved, FPL will be recovering expenses associated
8 with the settlement agreement to buy out the Cypress Energy
9 Company Standard Offer Contract. If approved, Staff recommends
10 that 42 percent of the actual annual settlement agreement payments
11 should be recovered through the Fuel Cost Recovery Clause and 58
12 percent should be recovered through the Capacity Cost Recovery
13 Clause.

14

15 The petition for approval to recover costs associated with the
16 termination of the Standard Offer Contract is scheduled to go before
17 the Commission on June 25, 1996, one day after this clause filing,
18 therefore, per Staff's recommendation, FPL has included 42 percent,
19 or \$5,220,180 of the actual annual settlement agreement payments
20 in the October 1996 through March 1997 Fuel Cost Recovery Clause
21 and 58 percent, or \$8,768,730 of the actual annual settlement
22 agreement payments in the October 1996 through September 1997
23 Capacity Payment Recovery Clause.

24

CAPACITY PAYMENT RECOVERY CLAUSE

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Q. Is FPL proposing any changes to the implementation of the Capacity Cost Recovery Clause filing?

A. Yes, it is. FPL is proposing that the Capacity Cost Recovery Clause filing be made on an annual basis rather than the current semi-annual basis.

Q. Please explain why FPL is proposing this change?

A. Filing on an annual basis will levelize the impact of the clause on our customers' rates since seasonal fluctuations in sales will be avoided. In addition, filing on an annual basis will greatly reduce the amount of paperwork produced, filed and processed by FPL, the Commission, and other parties.

Q. Please describe Page 3 of Appendix IV.

A. Page 3 of Appendix III provides a summary of the requested capacity payments for the projected period of October 1996 through March 1997. Total recoverable capacity payments amount to \$430,838,159, and include payments of \$207,711,591 to non-cogenerators, payments of \$323,734,672 to cogenerators and \$8,768,730 of Mission Settlement payments. This amount is offset by revenues from capacity sales of \$2,600,155 and \$56,945,592 of jurisdictional capacity related payments included in base rates plus the net overrecovery of

1 \$42,305,151 reflected on line 9. The net overrecovery of \$42,305,151
2 includes the final overrecovery of \$28,927,083 for the October 1995
3 through March 1996 period less the estimated/actual overrecovery of
4 \$13,378,068 for the April 1996 through September 1996 period.

5

6 **Q. Will FPL be requesting recovery of any other costs through the**
7 **Capacity Cost Recovery Clause?**

8 A. Yes. As discussed previously in the Fuel Recovery Clause section of
9 my testimony and stated above, FPL has included 58 percent
10 (\$8,768,730) of the actual annual settlement agreement payments
11 associated with the buy-out of the Cypress Energy Company Standard
12 Offer Contract in the calculation of the Capacity Cost Recovery factor
13 for the period October 1996 through September 1997.

14

15 **Q. Please describe Page 4 of Appendix III.**

16 A. Page 4 of Appendix III calculates the allocation factors for demand and
17 energy at generation. The demand allocation factors are calculated
18 by determining the percentage each rate class contributes to the
19 monthly system peaks. The energy allocators are calculated by
20 determining the percentage each rate contributes to total kWh sales,
21 as adjusted for losses, for each rate class.

22

23 **Q. Please describe Page 5 of Appendix III.**

24 A. Page 5 of Appendix III presents the calculation of the proposed

- 1 Capacity Payment Recovery Clause (CCR) factors by rate class.
2
- 3 **Q. Please explain the calculation of the CCR Estimated/Actual True-**
4 **up amount you are requesting this Commission to approve.**
- 5 A. Appendix III, page 6, shows the calculation of the CCR
6 Estimated/Actual True-up amount. The Estimated/Actual True-up for
7 the period April 1996 through September 1996 is an overrecovery,
8 including interest, of \$13,378,068 (Column 7, lines 14 plus 15). This
9 amount, plus the Final True-up overrecovery of \$28,927,083 (Column
10 7, line 17) deferred from the period October 1995 through March 1996,
11 presented in my Final True-up testimony filed on May 20, 1996, results
12 in the End of Period overrecovery of \$42,305,151 (Column 7, line 19).
13
- 14 **Q. Is this true-up calculation consistent with the true-up**
15 **methodology used for the other cost recovery clauses?**
- 16 A. Yes it is. The calculation of the true-up amount follows the procedures
17 established by this Commission as set forth on Commission Schedule
18 A2 "Calculation of True-Up and Interest Provision" for the Fuel Cost
19 Recovery clause.
20
- 21 The resulting overrecovery of \$42,305,151 has been included in the
22 calculation of the Capacity Cost Recovery factor for the period
23 October 1996 through September 1997.
24

- 1 **Q. Please explain the calculation of the Interest Provision.**
- 2 A. Appendix III, page 7, shows the calculation of the interest provision
3 and follows the same methodology used in calculating the interest
4 provision for the other cost recovery clauses, as previously approved
5 by this Commission.
6
- 7 The interest provision is the result of multiplying the monthly average
8 true-up amount (line 4) times the monthly average interest rate (line 9).
9 The average interest rate for the months reflecting actual data is
10 developed using the 30 day commercial paper rate as published in the
11 Wall Street Journal on the first business day of the current and
12 subsequent months. The average interest rate for the projected
13 months is the actual rate as of the first business day in June 1996.
14
- 15 **Q. Have you provided a schedule showing the variances between
16 the Estimated/Actuals and the Original Projections?**
- 17 A. Yes. Appendix III, page 8, shows the Estimated/Actual capacity
18 charges and applicable revenues compared to the original projections
19 for the period.
20
- 21 **Q. What is the variance related to capacity charges?**
- 22 A. The variance related to capacity charges is a \$9.0 million decrease.
23 This variance is primarily due to a \$10.4 million decrease in Unit
24 Power (UPS) Capacity Charges. This decrease is primarily due to

1 prior period adjustments of \$9.1 million reflected on the April and May
2 invoices.

3

4 **Q. What is the variance in Capacity Cost Recovery revenues?**

5 A. As shown on line 13, Capacity Cost Recovery revenues, net of
6 revenue taxes, are now estimated to be \$2.7 million higher than
7 originally projected.

8

9 **Q. What effective date is the Company requesting for the new
10 factors?**

11 A. The Company is requesting that the new FCR factors become
12 effective with customer billings on cycle day 3 of October 1996 and
13 continue through Customer billings on cycle day 2 of March 1997 and
14 that the new CCR factors become effective with customer billings on
15 cycle day 3 of October 1996 and continue through cycle day 2 of
16 September 1997. This will provide for 6 months of billing on the FCR
17 factors and 12 months of billing on the CCR factors for all our
18 customers.

19

20 **Q. What will be the charge for a Residential customer using 1,000
21 kWh effective October 1996?**

22 A. The total residential bill, excluding taxes and franchise fees, for 1,000
23 kWh will be \$77.12. The base bill for 1,000 residential kWh is \$47.46,
24 the fuel cost recovery charge from Schedule E1-E, Page 9 of

1 Appendix II for a residential customer is \$20.41, the Conservation
2 charge is \$2.09, the Capacity Cost Recovery charge is \$6.21, the
3 Environmental Cost Recovery charge is \$.17 and the Gross Receipts
4 Tax is \$.78. A Residential Bill Comparison (1,000 kWh) is presented
5 in Schedule E10, Page 39 of Appendix II.

6

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

A. Yes, it does.

1 Q (By Mr. Childs) Would you please summarize
2 your testimony?

3 A I'm here to address Issue 11b, Page 18 and
4 issue No. 24a, Page 24 of the Prehearing Order.

5 FPL at this time is requesting recovery of
6 \$1,463,620 in cost during the period of October 1996
7 through March 1997 for the thermal power uprate of
8 Turkey Point Units 3 and 4. This uprate will yield
9 fuel saving on a net present value basis in excess of
10 \$88 million after deducting for 10 million in
11 implementation cost also.

12 From January 1997 through December 1998 the
13 fuel savings are projected to exceed the cost of this
14 uprate. Therefore, FPL's requesting that it recover
15 the amortization of this uprate over this two-year
16 period.

17 In Docket 850001-EI, Order 14546, issued on
18 July 8th, 1985, the Commission stated that fossil fuel
19 related costs normally recovered through base rates,
20 but which were not recognized or anticipated in the
21 cost levels used to determine current base rates, and
22 which expended will result in fuel savings to
23 customers should be included in the calculation of the
24 fuel cost recovery clause factors, subject to
25 Commission approval and review.

1 Since this uprate will result in significant
2 fuel savings for FPL's customer, and the associated
3 cost is of the type which the Commission has
4 previously allowed to be recovered through the fuel
5 clause, FPL believes it is appropriate to bring this
6 issue forward for Commission consideration and
7 approval.

8 In addition, FPL at this time is proposing
9 that the capacity cost recovery clause filing be made
10 on an annual basis. Just as the conservation cost
11 recovery clause is currently being filed.

12 Filing on an annual basis levelizes the
13 clause because sales tend to vary seasonally. In
14 addition, filing annually will reduce the cost of
15 filing for FPL, the Commission and other parties.
16 This concludes my summary.

17 **MR. CHILDS:** We tender Ms. Morely for cross
18 examination.

19 **COMMISSIONER DEASON:** Mrs. Kaufman.

20 **MS. KAUFMAN:** Thank you, Mr. Deason.

21 **CROSS EXAMINATION**

22 **BY MS. KAUFMAN:**

23 **Q** Ms. Morley, you'll be glad to know I have
24 just a few questions on Issue 11b and 24a.

25 11b as the thermal uprate issue that you

1 addressed in your summary. Now, am I correct that --
2 I know that you have projected your cost for this
3 project and you've projected them to be about
4 \$10 million; is that correct?

5 A That's correct.

6 Q And I understand that in this recovery
7 period you're only asking to include about
8 \$1.5 million?

9 A That's correct.

10 Q Okay. But I want to talk to you for a
11 minute about your \$10 million projection. And as I
12 understand it, about 2.5 million of that \$10 million
13 amount will be spent on plant modifications; is that
14 correct?

15 A I think there's an interrogatory that
16 addresses that more specifically. It's in Staff's
17 first set, Interrogatory No. 1, and it breaks down the
18 cost of the project into three items: contract,
19 engineering and licensing, which is about 7.5 million;
20 construction labor field engineering, which is about
21 2.4 million; and the remaining item is materials and
22 equipment, and that's about 92,000.

23 Q Right. I have that interrogatory.

24 The item I'm focusing on is the middle one,
25 construction labor, field engineering, supervision and

1 I rounded it up to 2.5 million.

2 A Okay.

3 Q That involves making some modifications to
4 the plant themselves, does it not?

5 A That's contractor labor itself, yes.

6 Q So it involves making modifications to the
7 plant?

8 A Yes, as a cost of contractor labor.

9 Q And then there's about --

10 A I'm sorry, may I clarify that a little bit?

11 It also I believe includes some testing and

12 recalibration of the equipment.

13 Q Testing -- you mean to be sure that the
14 modifications have done what they are supposed to do.

15 A To make sure that the licensing goes
16 through.

17 Q Okay. Then the biggest category of expenses
18 is about 7.5 million for contract engineering and
19 licensing services; is that correct?

20 A That's right.

21 Q And do I understand that that involved
22 engineering work and other activities in order to have
23 your nuclear license changed?

24 A That is my understanding.

25 Q And then the remaining about -- again

1 rounding up a little bit about 100,000, was for actual
2 construction materials and equipment?

3 A Yes.

4 Q Okay. And then I understood you to say in
5 your summary that you also want to recover the
6 amortization on this amount?

7 A Right. Instead of collecting the 10 million
8 in one period, we're proposing to spread it over the
9 two-year period.

10 Q And I guess what I wanted to understand is
11 the end result when you're finished with this project
12 is going to be that these plants are going to produce
13 about 31 more megawatts than they now produce; is that
14 correct?

15 A The end result is going to be a fuel
16 savings. I think if you want more specific
17 information on the plant modification, I may not be
18 the appropriate witness for that.

19 Q Do you or don't you agree that when you are
20 finished with this project, the plants will be able to
21 produce 31 more megawatts than they can now produce?

22 A That's correct.

23 MS. KAUFMAN: That's all I have. Oh, I'm
24 sorry I forgot the other issue. I just have two
25 questions on 24a.

1 Q And that's the issue about going to an
2 annual capacity factor?

3 A Correct.

4 Q That's what FPL is proposing.

5 Would I be correct that the capacity factor
6 for FPL, if we stay on a six-month basis where we are
7 now, it's lower for FPL in the summer; isn't that
8 correct, generally?

9 A Because of the seasonal fluctuation, we can
10 have higher sales in the summer so the rate tends to
11 be lower, yes.

12 Q So you would have a lower capacity factor in
13 the summer and you would have a higher one in the
14 winter; is that correct?

15 A That tends to be the result of having of the
16 six-month filing, yes.

17 Q And if we go to the annual calculation that
18 you have proposed, I guess you'd agree that it's
19 obvious that in the summer customers would be paying a
20 higher factor than they would if we retain the
21 six-month calculation?

22 A Right. And the reverse would be true for
23 winter.

24 MS. KAUFMAN: That's all I have.

25 COMMISSIONER DEASON: Does Staff have any

1 questions for this witness?

2 MS. JOHNSON: No.

3 MR. CHILDS: I have no redirect, but I have
4 the task of identifying a number of additional sets of
5 testimony. I'll try to be rapid.

6 In addition, we have the prefiled testimony
7 of Mr. Birkett date 5-20-96; testimony of Ms. Morely
8 dated 7-30-96; testimony of Mr. Birkett dated 6-24-96.
9 Ms. Morley's testimony of 7-30-96, and the
10 supplemental testimony of July 30th, 1996, and
11 8-20-96. I would like to ask that all of that be
12 admitted this the record.

13 COMMISSIONER DEASON: Without objection it
14 will be so inserted.

15 MR. CHILDS: And the exhibits that are being
16 sponsored 6, 7, 8, 9, 10 and 11 and I would move their
17 add vision.

18 COMMISSIONER DEASON: I think they have
19 already been admitted, but to make sure we'll admit
20 them at this time without objection.

21 MR. CHILDS: The remaining witness that we
22 have is Mr. Villard and if there are no questions of
23 him, maybe I could just move admission.

24 COMMISSIONER DEASON: Any questions for
25 Witness Villard?

1 MS. JOHNSON: No.

2 MS. KAUFMAN: No.

3 COMMISSIONER DEASON: We will insert that
4 testimony into the record without objection.

5 There is an exhibit, I believe, that has
6 been identified as Exhibit 5.

7 MR. CHILDS: I'd move admission.

8 COMMISSIONER DEASON: Without objection
9 Exhibit 5 is admitted.

10 (Exhibit 5 received in evidence.)

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF C. VILLARD

DOCKET NO. 960001-EI

June 24, 1996

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

2 A. My name is Claude Villard. My business address is 700 Universe
3 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 (FPL) as Manager of
7 Nuclear Fuel.

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 explain FPL's projections
14 of nuclear fuel costs for the thermal energy (MMBTU) to be produced by
15 our nuclear units and costs of disposal of spent nuclear fuel. Both of these
16 costs were input values to POWRSYM for the calculation of the proposed

1 fuel cost recovery factor for the period October 1996 through March 1997.

2

3

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

5 A. FPL's nuclear fuel cost projections are developed using energy production
6 at our nuclear units and their operating schedules, consistent with those
7 assumed in POWRSYM, for the period October 1996 through March 1997.

8

9 **Q. Please provide FPL's projection for nuclear fuel unit costs and energy
10 for the period October 1996 through March 1997.**

11 A. We estimate the nuclear units will produce 126,959,392 MBTU of energy
12 at a cost of \$0.351 per MMBTU, excluding spent fuel disposal costs for
13 the period October 1996 through March 1997. Projections by nuclear unit
14 and by month are provided on Schedule E-4 of Appendix II.

15

16 **Q. Please provide FPL's projections for nuclear spent fuel disposal costs
17 for the period October 1996 through March 1997 and what is the basis
18 for FPL's projections.**

19 A. FPL's projections for nuclear spent fuel disposal costs are provided on
20 Schedule E-2 of Appendix II. These projections are based on FPL's
21 contract with the Department of Energy (DOE), which sets the spent fuel
22 disposal fee at 1 mill per net Kwh generated minus transmission and

1 distribution line losses.

2

3 **Q. Please provide FPL's projection for Decontamination and**
4 **Decommissioning (D&D) costs to be paid in the period October 1996**
5 **through March 1997 and what is the basis for FPL's projection.**

6 A. As indicated in prior testimony, The National Energy Policy Act of 1992
7 (The Act) requires FPL to make certain payments to a fund established at
8 the U.S. Treasury, to cover the cost of decontamination and
9 decommissioning DOE's enrichment facilities. D&D payments are in
10 direct proportion to the amount of enrichment services purchased by FPL,
11 divided by the amount produced by the DOE, through October 1992,
12 multiplied by the total annual assessment of \$480M, as specified in the
13 Energy Policy Act of 1992, and escalated for inflation using the CPI-U
14 (consumer price index - for urban customers). FPL's projection of \$5.26M
15 for D&D costs to be paid during the period October 1996 through March
16 1997 is included on Schedule E-2 of Appendix II.

17

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

20 A. Yes. FPL is requesting approval to recover approximately \$10 million in
21 costs relating to increasing the thermal power of FPL's Turkey Point
22 Nuclear Units 3 and 4 (hereafter referred to as thermal power uprate). The

1 thermal power uprate of each nuclear unit, from 2200 megawatts thermal
2 to 2300 megawatts thermal, will increase the output of each unit by about
3 31 megawatts electric.

4

5 **Q. What benefits will FPL's customers receive from the thermal power**
6 **uprate of the nuclear units at Turkey Point?**

7 A. FPL projects an approximate 6.1M megawatt hours of additional
8 generation from the Turkey Point nuclear units, assuming that the units
9 would increase power in January, 1997. This higher nuclear generation
10 will result in an estimated fuel savings of about \$198 million, representing
11 a present value of approximately \$97 million (or \$88 million after
12 deducting implementation costs) through the year 2011. These savings are
13 due to the difference between low cost nuclear fuel replacing higher cost
14 fossil fuel. The estimated fuel savings were calculated using the
15 production costing model, POWRSYM. Two POWRSYM cases, with and
16 without the effects of the thermal power uprate, were compared. The
17 Turkey Point assumptions were adjusted to include an increase in output
18 of 31 megawatts, as well as slight adjustments for winter and summer heat
19 rates and equivalent availability factors. The net present value fuel savings
20 were derived by using a rate of 9.2%, which represents FPL's long term
21 decision making discount rate. Document No. 1 shows the breakdown of
22 cost recovery and projected yearly fuel savings.

1

2 **Q. What activities and costs are involved in the thermal power uprate of**
3 **the nuclear units at Turkey Point?**

4 A. The thermal uprate requires FPL to formally request the Nuclear
5 Regulatory Commission to amend the operating license for Turkey Point.
6 To receive such license amendment, FPL is required to perform analyses
7 on all affected plant systems, structures and components to ensure there are
8 no adverse impacts on plant safety and operations resulting from the higher
9 power level. Furthermore, the thermal power uprate will also require
10 minor plant modifications.

11

12 We are seeking recovery of \$7.5M in payments to outside contractors for
13 engineering, safety and licensing efforts, and \$2.5M for materials and plant
14 modifications, for a total of \$10M. These costs exclude FPL payroll costs
15 and payroll expenses which total approximately \$2.3M. We expect the
16 thermal power uprate of each unit will be approved and in-service by year
17 end, 1996. FPL is asking for recovery of these costs starting January 1,
18 1997.

19

20 **Q. Please explain why this cost should be approved under the Fuel Cost**
21 **Recovery Clause?**

22 A. Commission Order No. 14546 provides the basis for recovery of fuel

1 related costs normally recovered through base rates but which were not
2 recognized or anticipated in the cost levels used to determine current base
3 rates and which, if expended, will result in fuel savings to customers.

4

5 This commission order and the significant fuel cost savings to our
6 customers, form the basis for requesting recovery of these costs related to
7 the thermal power uprate of FPL's Turkey Point Units 3 and 4 through the
8 Fuel Cost Recovery Clause. The cost recovery treatment of the Turkey
9 Point thermal power uprate is discussed in the testimony of FPL Witness
10 B. T. Birkett.

11

12 **Q. Are there currently any unresolved disputes under FPL's nuclear fuel**
13 **contracts?**

14 **A. Yes.** As reported in prior testimonies, there are two unresolved disputes.

15

16 The first dispute is under FPL's contract with the Department of Energy
17 (DOE) for final disposal of spent nuclear fuel. FPL, along with a number
18 of electric utilities, has filed suit against the DOE over DOE's denial of its
19 obligation to accept spent nuclear fuel beginning in 1998. On December
20 14, 1995, DOE and the electric utilities began mediation, however no
21 agreement could be reached. Oral arguments took place on January 17,
22 1996, before the U.S. Court of Appeals for the District of Columbia.

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Secondly, FPL is currently seeking to resolve a price dispute for uranium enrichment services purchased from the United States (U.S.) Government, prior to July 1, 1993.

Our contract for enrichment services with the U.S. Government calls for pricing to be calculated in accordance with "Established DOE Pricing Policy". Such policy had always been one of cost recovery, which included costs related to the Decontamination and Decommissioning (D&D) of the DOE's enrichment facilities. However, the Energy Policy Act of 1992 (The Act) requires utilities to make separate payments to the U.S. Treasury for D&D, starting in Fiscal 1993, as FPL has been doing. Therefore, D&D should not have been included in the price charged by DOE for deliveries during Fiscal 1993, and the price should have been reduced accordingly. FPL had filed a claim with the Contracting Officer, on July 14, 1995, for a refund for such deliveries. On October 13, 1995, the DOE Contracting Officer officially rejected FPL's claim. FPL has until October 13, 1996 to file an appeal.

Meanwhile, in a related case, the U.S. Court of Federal Claims ruled that the D&D special assessment itself was unlawful. The Court found that in this specific instance, the special assessment was essentially a retroactive

1 price increase on a contract which had already been performed, and was
2 therefore illegal. The DOE has appealed this decision to the U.S. Court
3 of Appeals for the Federal Circuit and the parties are currently filing their
4 final briefs. Both sides will then await oral arguments, which are
5 scheduled in the Fall. Because the U.S. Court of Federal Claims ruling
6 relied in large part on a case currently being reviewed by the U.S.
7 Supreme Court, the Winstar case, FPL is awaiting the Supreme Court
8 decision, prior to proceeding with the appeal of its case.

9

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

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

1 **MR. CHILDS:** That concludes our witnesses.

2 **COMMISSIONER DEASON:** Is Staff prepared to
3 make a recommendation?

4 **MS. JOHNSON:** Yes. Mr. Dudley will make the
5 recommendation on Issue 11a.

6 **MR. CHILDS:** Could I make a brief comment to
7 the Commission on the outages on St. Lucie before the
8 recommendation?

9 **COMMISSIONER DEASON:** How brief is brief?

10 **MR. CHILDS:** I realize that you rule from
11 the bench and I realize it may be out of order, but it
12 seemed to me that we have compressed some complex
13 material in a fairly short period of time and I'd like
14 to make a few observations very briefly if you will
15 permit.

16 **COMMISSIONER DEASON:** Very briefly.

17 **MR. CHILDS:** Commissioners, the point of the
18 testimony that is being sponsored about GPIF by FPL is
19 to bring to your attention that for a number of years
20 the GPIF clause has been in place as an incentive to
21 efficient performance by all utilities in the
22 operation of their plant, principally through
23 minimizing forced outages, shortening maintenance
24 outages and for nuclear units there's no benefit to
25 FPL through GPIF of reducing its refueling outages but

1 it has done so.

2 Therefore, for years this has been the tool
3 that has been used at the Commission's insistence.
4 And in this case without regard to whether there was
5 any fault on FPL's part the witness testified that the
6 result was a penalty under the GPIF of over
7 \$2 million.

8 I bring that to your attention because
9 that's a fact of life, but it's also a fact that these
10 units have performed exceedingly well and continue to
11 perform above the industry average. Moreover, as to
12 the specific items that have been addressed, I would
13 submit to you that there is no evidence at all that
14 Florida Power and Light Company acted imprudently or
15 unreasonably in the operation of the plant. It
16 suffered a number of experiences and incidents which
17 it would have preferred not to have happened. But
18 they did. But I don't believe that it's sufficient
19 for there to be a finding that FPL was unreasonable
20 and thus should have disallowance of replacement fuel
21 costs. Thank you very much.

22 **COMMISSIONER DEASON:** Thank you. Any
23 concluding comments by other parties? Ms. Kaufman.

24 **MS. KAUFMAN:** I would just like to make two
25 comments. One comment on each issue. On the issue of

1 the thermal upgrade, it's FIPUG's position that what
2 is being done to these plants, as laudable as it may
3 be, is a plant modification in order to increase the
4 plant's capacity by some 31 megawatts. We don't think
5 those kind of expenses are appropriate to flow through
6 the clause.

7 On the issue of going to an annual capacity
8 factor, it's my client's position that they would
9 prefer in the summer when the capacity cost is lower,
10 that that be the factor that be applied to them rather
11 than having a levelized one over the entire year.
12 Thank you.

13 **COMMISSIONER DEASON:** Thank you. Staff.

14 **MR. DUDLEY:** Commissioners, Staff does not
15 dispute the efficient operation of the plant St. Lucie
16 in the past. However, past experience may have lulled
17 the company in a period of complacency, allowing
18 long-term equipment problems, a lack of management
19 oversight and inefficient transfer of crucial
20 information between related plant divisions which have
21 resulted in higher cost replacement energy associated
22 with each of the outages discussed here today.

23 Staff acknowledges that the company has
24 since taken steps to correct the cause of each of
25 these outages. However, correcting a problem which

1 should have been identified and corrected by
2 management prior to causing the problem does not
3 justify cost recovery.

4 Therefore, Staff recommends that the
5 replacement energy cost associated with the turbine
6 trip during surveillance, the vehicle in the discharge
7 canal, the 1A2 reactor coolant pump seal package
8 failure, the power operator relief valve failure, the
9 spray down of containment and the pressurizer code
10 safety valve flange be disallowed. Each of these
11 events have an associated replacement cost ranging
12 from 418,000 to 4.2 million, with a combined total of
13 11.4 million, none of which Staff feels is appropriate
14 for cost recovery. Thank you.

15 **COMMISSIONER DEASON:** Commissioners,
16 questions?

17 **COMMISSIONER JOHNSON:** Any responses to the
18 statements just made about there wasn't adequate
19 evidence in the record to show that FPL was imprudent
20 or unreasonable in their actions?

21 **MR. DUDLEY:** I didn't hear the first part of
22 your question.

23 **COMMISSIONER JOHNSON:** Any response to that,
24 to the argument just made by Mr. Childs.

25 **MR. DUDLEY:** I think the cross today pointed

1 out that there were inadequacies on behalf of
2 management of FPL.

3 If you want to, you can point me to an event
4 and -- or I'll go to an event and point it out to you.

5 The first and obvious to me is the vehicle
6 in the discharge canal. FPL indicates that they
7 routinely left this gate unlocked simply for ease of
8 access for employees. However, as indicated in his
9 interrogatory response, it was clearly posted "no
10 trespassing."

11 Substations are also clearly posted "no
12 trespassing," but if utility personnel is coming in
13 and out, they don't go and leave the gate unlocked.
14 It simply allows access to FPL property which for the
15 sole reason the gate is there in the first place,
16 public access is not to be allowed.

17 With respect to that issue also, with GPIF,
18 Mr. Silva indicated that was an external event beyond
19 the control of FPL. I hardly think that the driver of
20 the vehicle would have busted the gate down had it
21 been locked in order to go sunbathe on the beach.

22 The reactor coolant pump seal failure.

23 **COMMISSIONER JOHNSON:** Go back to that one.
24 Is this the -- because I'm confusing some of the
25 facts. In the last incident you said that the gate

1 was unlocked, but had FPL had the gate locked, then
2 the incident wouldn't have occurred.

3 **MR. DUDLEY:** Yes, ma'am. The gate was
4 unlocked which access of the Ford Explorer to get into
5 the area in and around the discharge canal. He
6 subsequently somehow fell into the canal; the vehicle
7 was lodged in.

8 Mr. Silva indicated in his testimony that
9 that event was classified as an external event beyond
10 the control of FPL. When he was asked would the
11 vehicle have been able to enter if the gate had been
12 locked? His response was "I don't know." I hardly
13 think that that driver would have busted that gate or
14 driven through it had it been locked.

15 **COMMISSIONER JOHNSON:** That was confusing
16 me. And I didn't know -- and I'm trying to think
17 about how that incident occurred and I didn't know it
18 was something were the guy just rammed through --

19 **MR. DUDLEY:** No, ma'am, it was open as it
20 indicates in the response.

21 **COMMISSIONER GARCIA:** And there was a "no
22 trespassing" sign.

23 **MR. DUDLEY:** Yes, there was.

24 **COMMISSIONER GARCIA:** And everybody in that
25 area of the state I'm sure knows that there's a

1 nuclear power plant somewhere around there. And this
2 guy, had he found a padlock, wouldn't have gone on the
3 beach. Is this your assumption? You're thinking is
4 had there been a padlock, none of these events would
5 have happened.

6 MR. DUDLEY: No, sir. My discussion is only
7 with regard to the vehicle in the discharge. And I do
8 believe that had there been a -- the gate had been
9 locked, that that vehicle would not have entered that
10 discharge canal.

11 COMMISSIONER JOHNSON: Vehicle could not
12 have entered.

13 MR. DUDLEY: He may have got out of his
14 vehicle and walked down the beach but I do not feel
15 that that vehicle would have fell in it.

16 COMMISSIONER JOHNSON: I see what you're
17 saying.

18 MR. DUDLEY: So with respect to that I do
19 believe it was within the control of FPL.

20 The reactor coolant pump seal package
21 failure. Mr. Wade indicated that when the restaging
22 was being performed the temperature was 370 degrees.
23 FPL's procedures indicate that -- or caution, you
24 should not perform this if the temperature is greater
25 than 200 degrees. I believe the vendor says you

1 should not do this if it exceeds 250. However, they
2 had demonstrated that you could go up to as much as
3 300.

4 The manufacturer of the seal, Byron-Jackson,
5 had a letter -- FPL provided a letter to NRC from
6 Byron-Jackson indicating that this procedure was
7 acceptable. However, you must consider the age of
8 this seal. This seal was three years old. I believe
9 I heard in this testimony that these seals are
10 temporary in nature. That they are not intended to be
11 there for very long, and I hope I'm not misspeaking.

12 **COMMISSIONER JOHNSON:** Which seal -- I may
13 be confusing it, too, but as a part of his testimony
14 he was saying something about the seals -- maybe I'm
15 confusing it -- would last from one to six years, and
16 in this instance three? That confused me, too, so I
17 didn't know how you -- do you recall that?

18 **MR. DUDLEY:** I don't remember the six years.
19 I may not have been listening as closely.

20 **COMMISSIONER JOHNSON:** I had that written
21 down, but go ahead.

22 **MR. DUDLEY:** Aside from that, the operator
23 performed this procedure at a time which was not
24 appropriate due to the precautions known in their own
25 procedures, and by -- and known from the

1 recommendations of the vendor, or the seal
2 manufacturer.

3 **COMMISSIONER JOHNSON:** What should they have
4 done in that instance?

5 **MR. DUDLEY:** FPL should not have attempted
6 to restage that seal at a temperature which exceeded
7 the recommendations of their own plant procedures or
8 the recommendations of the vendor or the manufacturer
9 of that seal.

10 **COMMISSIONER JOHNSON:** Forgive me, because I
11 took bad notes: Do you remember their rationale as to
12 why they did?

13 **MR. DUDLEY:** Why they didn't?

14 **COMMISSIONER JOHNSON:** Uh, huh.

15 **MR. DUDLEY:** I believe as it states within
16 the NRC report, they had performed this procedure many
17 times in the past and it had been successful. I do
18 not know, nor do I think it's clear, whether or not
19 the times they had done it in the past was a
20 temperature of 370 degrees. The Company didn't
21 indicate that.

22 **COMMISSIONER DEASON:** The seal would have
23 had to have been replaced regardless; is that correct?

24 **MR. DUDLEY:** The reason for the restaging as
25 I understand is there's three of these seals, actually

1 four, but the middle seal was indicating full RCP,
2 reactor coolant pump, pressure. That meant that the
3 lower seal, which was ahead of it, was leaking or
4 indicated that it must be leaking.

5 In order to fix that leak, they attempted to
6 restage that seal, cause a differential, make the
7 seals squeeze together tightly. When they did this
8 procedure, the operating temperature was 370 degrees.
9 Aside from the precautions, which were indicated in
10 the procedures, not to do it or to caution doing this
11 procedure when the temperature exceeds 200.

12 COMMISSIONER DEASON: What was the
13 ramification of that decision?

14 MR. DUDLEY: The ramification of that
15 decision was when they -- I guess the ultimate
16 ramification was the outage of 171 hours and 36
17 minutes of down time.

18 COMMISSIONER DEASON: If they had not even
19 attempted to reseal that valve, what would have been
20 the result of that decision?

21 MR. DUDLEY: If I'm not mistaken, each of
22 those seals -- and Mr. Childs please correct me if I'm
23 wrong -- is designed in order to withstand the full
24 RCP pressure. I'm not sure whether or not they could
25 have allowed that package to continue its operation

1 without having to reseal that lower seal. But I would
2 believe that had the operation temperature been
3 reduced, restaging of that seal may have been
4 successful. As it was, the temperature exceeded the
5 the specifications; the restaging was not successful.
6 I believe they tried to, once they had done that the
7 middle seal started leaking and it may have even
8 progressed up to the upper seal or high seal.

9 **COMMISSIONER JOHNSON:** So your analysis goes
10 to two mistakes. Had they reduced the temperature
11 then it would have been okay to whatever you call it,
12 reseal or restage, but because -- what was their error
13 again? Not reducing the temperature or attempting to
14 restage.

15 **MR. DUDLEY:** I don't try to separate the
16 two. I assume it's all a single event in that their
17 attempt to restage this seal occurred or was performed
18 under procedures which were inappropriate. Excuse me,
19 not the procedure, but at a time which was
20 inappropriate.

21 **COMMISSIONER JOHNSON:** And the timing was
22 inappropriate --

23 **MR. DUDLEY:** Due to the operating
24 temperature.

25 **COMMISSIONER JOHNSON:** And they should have

1 known that had they read the manufacturing warnings?

2 MR. DUDLEY: Their own procedures indicated
3 precaution which indicate that they should not do this
4 or it cautioned them.

5 COMMISSIONER GARCIA: You said the record
6 showed they had done it before, though, at higher
7 temperatures.

8 MR. DUDLEY: No, sir. I said they had done
9 it before. I don't think the record indicates whether
10 or not their past successful performance of this
11 procedure was at 370 degrees. I could easily say
12 we've done it in the past successfully and it had been
13 210 degrees.

14 COMMISSIONER JOHNSON: Okay. I think I
15 follow you.

16 COMMISSIONER DEASON: Any further questions?

17 MR. DUDLEY: Are we still going through the
18 events?

19 COMMISSIONER JOHNSON: You went over the
20 main two I was concerned about. I just had some
21 questions regarding what the witness said that seemed
22 pretty viable to me.

23 MR. DUDLEY: One thing also about the
24 vehicle in the discharge canal, Mr. Wade indicated
25 today that I think it was \$44,000 was recovered from

1 the driver, which was used to offset the repair cost,
2 if you will, to remove the vehicle, and that they also
3 recovered an additional \$50,000 through insurance or
4 something for replacement energy cost.

5 I recommend to the Commission that if they
6 haven't already done so, the replacement energy cost
7 of the \$50,000 which they obtained should be used to
8 reduce the fuel cost.

9 COMMISSIONER GARCIA: Mr. Childs, do you
10 know if that's the case or not?

11 MR. CHILDS: That is the effect of what the
12 Company has done. It is credited to fuel because it
13 was for that purpose. I mean it will show up. It
14 won't show up this period because the forecasts have
15 already been done but it will show up.

16 MR. DUDLEY: Is that sufficient?

17 COMMISSIONER DEASON: It will be part of the
18 true-up.

19 MR. DUDLEY: That's fine. As long as that
20 treatment is given to those dollars.

21 With respect to the power operator relief
22 valve -- do you want me to go on?

23 COMMISSIONER JOHNSON: How many more do you
24 have?

25 MR. DUDLEY: Well, there were several

1 events.

2 **COMMISSIONER DEASON:** Commissioners, I've
3 got to go. I can't get out of it. I'm going to tell
4 you what my vote is and I'm going to pass the gavel.
5 If there is a problem, we'll just take it up tomorrow.

6 **COMMISSIONER GARCIA:** Unless Commissioner
7 Johnson has a motion -- I mean, has any more
8 questions.

9 **COMMISSIONER DEASON:** I'm not trying to put
10 any pressure on the two of you. I want you to take as
11 much time as you want. I'm satisfied --

12 **COMMISSIONER GARCIA:** Go ahead and do that.

13 **COMMISSIONER DEASON:** I don't think that --
14 first of all, let me say I appreciate the hard work
15 Staff has put in addressing all of these issues. I
16 think that it is important that these issues be
17 identified and they be addressed. They have been
18 addressed.

19 I don't think that any of these occurrences
20 rise to the level of imprudency to which there should
21 be a disallowance of replacement fuel cost. I also
22 believe that the GPIF has worked in this situation,
23 and to the extent that there has been a penalty, if
24 you want to call it, has already been assessed, that
25 gives incentive to the Company, which is the way the

1 GPIF was designed to start with, to prevent these type
2 things from occurring. However, we all know that
3 particularly with something as complex as a nuclear
4 unit that you're not going to have your unit on
5 line 100% of the time.

6 I don't think that any of these particular
7 individual occurrences rise to the level of
8 imprudency. I would not have any disallowance beyond
9 the GPIF effect of these outages.

10 As far as the Issue 11b, I would adopt
11 Staff's recommendation. I know I've not heard it but
12 their position is as expressed in the Prehearing
13 Order, I agree with that position. I think that is
14 consistent with the Company's position.

15 And in regard to Issue 24, I'm also in
16 agreement with Staff's position which I think is in
17 agreement with the Company's position, that it would
18 be appropriate at this time, given the experience that
19 we have had, to go to an annual recovery factor. And
20 that's what I would do.

21 COMMISSIONER GARCIA: I don't have any
22 disagreements with you. And if Commissioner Johnson
23 has some further questions, that's fine. But I would
24 be willing to move what you just stated, unless
25 Commissioner Johnson has some further questions.

1 **COMMISSIONER DEASON:** I don't mean to cut
2 off debate.

3 **COMMISSIONER JOHNSON:** That's fine, Terry.
4 I probably would have just made them go through all of
5 this to make sure that everybody understood it because
6 I was having some problems finding that these
7 activities actually reached the level -- the two he
8 explained were the ones I was most concerned with.
9 But the other ones, I was even going to have a hard
10 time finding those even more so.

11 **COMMISSIONER GARCIA:** I'll go ahead and move
12 what you just stated since you're holding the gavel.
13 I just want to state for the record, I agree with
14 Commissioner Deason, Staff has done a wonderful job.
15 It's your job to find these things. We want to see
16 them. It's not like we're giving them a short trip.
17 I enjoy the fact it was there and I appreciate the
18 work that that took. And I always want to see this
19 type of investigation and I want to have this as an
20 issue before us. But likewise I agree with
21 Commissioner Deason on this. So I will move.

22 **COMMISSIONER DEASON:** So you would move
23 those positions on Issues 11a, 11b and 24.

24 **COMMISSIONER GARCIA:** Correct.

25 **COMMISSIONER DEASON:** Is there a second?

1 **COMMISSIONER JOHNSON:** Second.

2 **COMMISSIONER DEASON:** Show that is the
3 Commission's decision unanimously.

4 And the remaining issues that are unresolved
5 are fallouts. And is there anything else that the
6 Commission needs to address today?

7 **MS. JOHNSON:** It's been a long day but I'm
8 not quite sure if the Commission has voted on the
9 stipulation?

10 **COMMISSIONER DEASON:** On all of the
11 stipulated issues.

12 **MS. JOHNSON:** That's correct.

13 **COMMISSIONER DEASON:** I think that we have
14 not; in the 01 docket we have not and we do need to
15 address this.

16 **COMMISSIONER GARCIA:** Do I have to move them
17 individually or I just move all of the issues that
18 have been stipulated.

19 **MS. JOHNSON:** Move all the ones that have
20 been stipulated.

21 **COMMISSIONER GARCIA:** I'm going to move all
22 of the issues that have been stipulated.

23 **COMMISSIONER JOHNSON:** Second.

24 **COMMISSIONER DEASON:** Moved and seconded.
25 Show that all the stipulated issues are also approved

1 unanimously.

2 Anything else?

3 MS. JOHNSON: The only remaining item is
4 that I need to get together with the presiding officer
5 to set a date certain for filing briefs on Issue 9.

6 COMMISSIONER DEASON: Get with me. We'll
7 just issue a procedural order setting out that date
8 and advise all of the parties and we'll procedure from
9 that point.

10 This hearing is adjourned. Thank you all.

11 (Thereupon, the hearing concluded at

12 5:20 p.m.)

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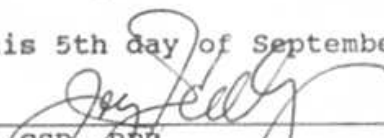
1 STATE OF FLORIDA)
 : CERTIFICATE OF REPORTERS
 2 COUNTY OF LEON)

3 We, JOY KELLY, CSR, RPR, Chief, Bureau of
 Reporting, ROWENA NASH HACKNEY and H. RUTHE POTAMI,
 4 CSR, RPR, Official Commission Reporters,

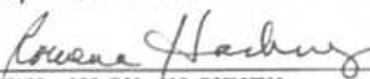
5 DO HEREBY CERTIFY that the Hearing in Docket
 No. 960001-EI was heard by the Florida Public Service
 6 Commission at the time and place herein stated; it is
 further
 7

8 CERTIFIED that we stenographically reported
 the said proceedings; that the same has been
 transcribed under our direct supervision; and that
 9 this transcript, consisting of Volumes 1 through 3,
 527 pages, constitutes a true transcription of our
 10 notes of said proceedings.


11 DATED this 5th day of September, 1996.

12 

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