

**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

FLORIDA POWER CORPORATION

DOCKET NO. 970096-EQ

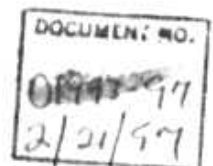
**TESTIMONY CONFORMED TO
FLORIDA ADMINISTRATIVE CODE NO. 25-22.048 (4)(a)**

**DIRECT TESTIMONY
AND EXHIBITS
OF
RANDALL J. FALKENBERG**

**ON BEHALF OF THE
FLORIDA INDUSTRIAL POWER USERS GROUP**

**KENNEDY AND ASSOCIATES
ATLANTA, GEORGIA**

FEBRUARY 1997



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DIRECT TESTIMONY OF RANDALL J. FALKENBERG

Q. Please state your name and business address.

A. Randall J. Falkenberg, Suite 475, 35 Glenlake Parkway, Atlanta, Georgia 30328.

Q. What is your occupation and by whom are you employed?

A. I am a utility rate and planning consultant holding the position of Vice President and Principal with the firm of J. Kennedy and Associates, Inc. ("Kennedy and Associates").

Q. Please describe briefly the nature of the consulting services provided by Kennedy and Associates.

A. Kennedy and Associates provides consulting services in the electric, gas, and telephone utility industries. The firm provides expertise in system planning, load forecasting, financial analysis, cost of service, utility accounting, revenue requirements, and rate design. Our clients have included the Georgia, Louisiana, and Oklahoma Public Service Commissions, the Attorneys General of Kentucky and New Mexico, the Office of Public Utility Counsel of Texas, the Consumers' Utility Counsel of Georgia and industrial

J. Kennedy and Associates, Inc.

1 consumer groups in over a dozen states.

2 **I. QUALIFICATIONS**

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

4 **A. Exhibit No. ___ (RJF-1) describes my education and experience**
5 **within the utility industry. I have nineteen years of experience in**
6 **the utility industry and have worked for utilities, both as an**
7 **employee and as a consultant, and as a consultant to major**
8 **corporations, state and federal government agencies, and public**
9 **service commissions. I have been directly involved in a number of**
10 **cases related to the Bath County, Beaver Valley, Brandon Shores,**
11 **Grand Gulf, Millstone, Palo Verde, Perry, River Bend, Trimble**
12 **County, Vogtle, and Wilson power plants concerning the topics of**
13 **rate recognition, prudence, power system reliability, and**
14 **economics.**

15 **During my employment with EBASCO Services I developed**
16 **probabilistic production cost and reliability models used in studies**
17 **for numerous utility industry clients. I personally directed a**
18 **number of marginal and avoided cost studies performed for**
19 **compliance with the Public Utility Regulatory Policies Act of 1978**
20 **("PURPA"). At EBASCO, I also participated in a wide variety of**
21 **consulting projects in the rate, planning, and forecasting areas.**

22 **In 1982 I accepted the position of Senior Consultant with**

J. Kennedy and Associates, Inc.

1 Energy Management Associates ("EMA"). At EMA I trained and
2 consulted with planners and financial analysts at several utilities
3 in applications of the PROMOD III and PROSCREEN II planning
4 models. In particular, I assisted planners in the application of
5 these models to the preparation of studies of revenue
6 requirements and the financial impact of alternative expansion
7 plans. I also assisted in EMA's educational seminars and trained
8 utility personnel in revenue requirements analysis, production cost
9 modeling, reliability analysis, and other techniques of generation
10 planning.

11 Since joining Kennedy and Associates in 1984, I have been
12 responsible for the firm's work in the areas of generation planning,
13 reliability analysis, and the rate treatment of new capacity
14 additions. I have presented expert testimony on these and other
15 matters in over seventy-five cases before regulatory commissions
16 and courts in Arkansas, Connecticut, Florida, Georgia, Kentucky,
17 Louisiana, Maryland, Michigan, Minnesota, New Mexico, New
18 York, North Carolina, Ohio, Pennsylvania, Texas, and West
19 Virginia. Included in Exhibit No. ____ (RJF-1) is a list of my
20 appearances.

21 Q. Have you previously presented testimony before the Florida Public
22 Service Commission?

1 A. Yes. In 1984 I appeared before the Florida Public Service
2 Commission ("FPSC") in Florida Power Corporation ("FPC" or "the
3 Company") Docket No. 830470-EI and addressed issues related
4 to the Crystal River 5 generating unit. In 1987 I filed testimony
5 in FPC Docket No. 870220-EI related to cost allocation and rate
6 design and the performance of the Crystal River 3 nuclear plant.
7 In 1992 I filed testimony in FPC Docket No. 910890-EI related to
8 cost allocation and a variety of revenue requirements issues.
9 Docket Nos. 870220-EI and 91890-EI were settled prior to my
10 appearance. In 1992 I filed testimony in TECO's general rate case
11 (Docket No. 920324-EI) addressing issues related to cost
12 allocation, jurisdictional separations and interruptible rates. In
13 1996 I testified in TECO's Polk County proceeding (Docket No.
14 9600409-EI) addressing issues related to the rate treatment of
15 that project. I have also presented testimony in a number of other
16 proceedings addressing issues related to interruptible load, off-
17 system sales and DSM.

18 **II. INTRODUCTION AND SUMMARY**

19 Q. On whose behalf are you appearing and what is the purpose of
20 your testimony?
21 A. I am appearing on behalf of the Florida Industrial Power Users
22 Group ("FIPUG"). These industrial customers are among the

1 largest power consumers on the FPC system and have a direct
2 interest in the Commission's possible approval and regulatory
3 treatment of the Tiger Bay power plant sale and contract
4 termination which will be addressed in this case. FIPUG has asked
5 Kennedy and Associates to review FPC's filing and comment on
6 the Company's proposal to purchase the Tiger Bay plant and
7 terminate the power purchase contract.

8 Q. Could you please summarize your conclusions?

9 A. Yes. I have concluded as follows:

10 1. While FPC projects substantial benefits from the Tiger Bay
11 transaction over 29 years, it proposes to have existing
12 customers fund the buy out over 5 years. When viewed as
13 an investment, as presently structured, this is a poor deal
14 for ratepayers. From ratepayers' perspective, the
15 probability of death, relocation, sale or termination of
16 business interests, conservation or self generation prior to
17 the end of the current Tiger Bay contract makes this a high
18 risk proposal. In addition, new customers who come on the
19 system will reap the benefits paid for by current ratepayers.
20 For this reason, FIPUG opposes the buy out in its current
21 form, but would not oppose it if it were modified so as to
22 be rate neutral to consumers over time and across rate

- 1 classes.
- 2 2. The real beneficiary of the Tiger Bay proposal will be FPC,
3 not the ratepayers. Unlike more routine contract buy
4 downs, in this case, FPC wants to acquire and own an
5 efficient power plant paid for by ratepayers in a way that
6 will enhance its competitive position by the time customer
7 choice arrives. To approve the transaction as proposed
8 would be to require ratepayers to subsidize FPC's future
9 entry into a competitive market.
- 10 3. The FPC proposal will substantially increase energy (fuel)
11 related costs. When compared to the current contracts,
12 high load factor customers will be disadvantaged relative to
13 other groups.
- 14 4. FPC proposes to acquire an asset it says is needed to serve
15 its customers. For ratemaking purposes, it doesn't matter
16 whether FPC builds or buys a plant. If the Commission
17 decides to approve the purchase of Tiger Bay, it should
18 reject FPC's proposal to charge ratepayers the cost of
19 purchasing the generator over five years. Instead the
20 Company should be required to capitalize these costs and
21 they should be afforded the same rate treatment as any
22 other conventional power plant, including a review of

1 prudence and need in FPC's next rate case.

- 2 5. As opposed to FPC's proposal to collect the termination
3 charges from ratepayers over the next five years, if the
4 Commission decides to approve this proposal, it should
5 allow the Company to continue to charge ratepayers on the
6 basis of the current contract and defer any unrecovered
7 termination charges. Based on FPC's analysis, these
8 deferrals will be eliminated over time after the 5 year period
9 ends.

10 **III. REGULATORY AND ECONOMIC ANALYSIS**

11 **OF TIGER BAY BUY OUT**

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

13 **A. I will present the principles underlying FIPUG's position relative to**
14 **the question of cogeneration contract termination and buy outs in**
15 **general, with specific application to Tiger Bay. I believe this will**
16 **assist the Commission in understanding our recommendations in**
17 **the proceeding. FIPUG believes the following principles should**
18 **govern the disposition of cogeneration buy outs:**

- 19 1. FIPUG supports cogeneration. PURPA requires that public
20 policy promote cogeneration. Cogeneration has proven to
21 be a beneficial conservation measure which promotes the
22 efficient use of fuels and a degree of healthy competition

- 1 for the opportunity to provide generation.
- 2 2. FIPUG endorses the concept of early contract termination
3 in any case where a buy out is more economical than
4 continued purchase under an existing contract. However,
5 each such transaction must stand or fall on its own merits.
6 The rate recovery of buy out charges should be
7 accomplished equitably and in such a manner as to keep
8 the price for generation at reasonable and competitive
9 levels. This can best be done by requiring cogeneration buy
10 outs to be "self financing" with the recovery of contract
11 termination payments deferred and paid off from savings
12 relative to the level of existing contract charges. Where
13 possible, rate neutrality should be the goal.
- 14 3. Whether a utility acquires a new generation resource by
15 construction, or by purchase from a cogeneration developer
16 should make no difference for ratemaking purposes. The
17 rate and accounting treatment of all new generators should
18 follow traditional practices and procedures.
- 19 4. If the Commission does not accept a method to maintain
20 rate neutrality such as discussed in point 2, it should adopt
21 other approaches to mitigate the rate impacts of buy outs.
22 In many cases, utilities are already collecting substantial

- 1 funds from ratepayers for conservation and DSM programs.
- 2 To the extent that the buy out of a QF contract is a more
- 3 economic option, DSM expenditures associated with less
- 4 effective programs should be diverted to fund buy outs.
- 5 5. In addition to point 4, to the extent that a utility is earning
- 6 above its low end rate of return, buy out charges should be
- 7 absorbed by the utility before being collected in an
- 8 automatic adjustment clause.
- 9 6. Buy outs should not be justified on the basis of reducing
- 10 stranded costs. Unless there is a specific plan to transition
- 11 to retail competition, such proposals are premature and
- 12 ignore the fact that stranded costs may be negative for
- 13 some utilities.
- 14 Q. Please elaborate on the second point above.
- 15 A. In many cases, the prices embedded in QF contracts exceed the
- 16 utilities' current avoided costs. There are many reasons for this,
- 17 but the principal problem is that in years past utilities and/or the
- 18 Commission assumed that the avoided unit would be a coal-fired
- 19 power plant. Currently, the actual least cost capacity expansion
- 20 option is usually a gas-fired combined cycle or combustion turbine
- 21 power plant. Because these resources are much lower in cost
- 22 than coal-fired generators, utilities who are paying for QF

1 generation on the basis of avoided coal-fired capacity are paying
2 above market for the value of the generation received. (Had the
3 utility actually built the avoided unit, it would be in the same
4 posture but with less flexibility). Thus, ratepayers are now paying
5 for contracts which in many cases exceed the current avoided
6 cost. As a result, the opportunity exists in some cases to reduce
7 cost by early termination of these contracts.

8 Q. Will such terminations always be in the best interests of
9 ratepayers?

10 A. Not necessarily. The answer really depends on the cost of the
11 buy out relative to savings. If the cost of the buy out (and
12 replacement power and energy) is lower in present value terms
13 than the remaining contract prices then it could be economical.

14 However, it is worth noting that the apparent detriments of
15 certain QF contracts are only a result of the low current cost of
16 gas-fired generation. If we have learned anything over the past
17 few decades, it is that long term projections are always influenced
18 by recent experience (probably disproportionately so) and that
19 such projections are frequently quite wrong. In most cases, there
20 was some reasonable basis for assuming that coal-fired generation
21 would be more economic than gas or oil. While the prerequisite
22 assumptions underlying the original preference for coal may not

1 have yet materialized, it is possible that they could. A proxy for
2 a coal-fired resource could still prove to be more economical than
3 gas-fired generation. Thus, there is a certain amount of risk
4 inherent in any buy out which exchanges a contract for energy
5 based on the cost of coal-fired resources in favor of a greater
6 reliance on a gas-fired generation. In the case at hand, there is
7 certainly some value in Tiger Bay's obligation to absorb the risks
8 related to the price of natural gas for the next 29 years.

9 Q. What are the implications of this observation regarding the
10 concept of early contract termination?

11 A. If the option is to exchange the resource equivalent of a coal-fired
12 generator for a gas-fired one, there must be a meaningful benefit
13 for doing so. (I recognize that in this case Tiger Bay is a gas-fired
14 plant. However, the current contracts have energy prices based
15 on coal-fired power plants. We expect that Tiger Bay will meet its
16 obligations even if gas prices were to rise unexpectedly. Tiger Bay
17 also has a gas supply contract which provides additional
18 assurances in this regard.) There is some inherent advantage in
19 resources which are priced on the basis of coal-fired generation,
20 even if not apparent in current economic comparisons. For this
21 reason, the Commission should be reluctant to accept contract
22 termination arrangements which have less than clear cut economic

1 advantages. Every situation will probably be different. Some buy
2 outs may be much more attractive than others, and the
3 Commission should view each as a separate transaction and
4 require solid evidence of an economic advantage resulting from its
5 approval.

6 In addition, FPC's proposed acquisition of the Tiger Bay
7 plant makes this transaction different from the contract
8 termination situations that the Commission has considered in the
9 past and will consider in the future. It presents a different
10 dimension and calls for close and careful scrutiny. Because FPC
11 will actually wind up with an asset if its proposal is approved, the
12 Commission should take a careful look at the costs and benefits
13 as well as consider the implications of the transaction to determine
14 if there are any unintended consequences.

15 Q. How does this relate to the remainder of point 2 concerning
16 equitable rate treatment?

17 A. The Commission should recognize that the issue of contract buy
18 outs is also one which poses serious problems of inter-
19 generational equity as well as the uncertainty inherent in any long
20 term resource selection decision. In the case at hand, FPC
21 proposes to charge ratepayers for \$488 million in buy out costs
22 plus \$240 million in fuel costs and incur additional O&M expenses

1 and other costs of \$97 million over the next five years. These
2 costs total \$825 million and provide savings of only \$472 million
3 in contract charges over the same period. The ultimate benefit of
4 the \$353 million in extra costs will not be fully realized until 29
5 years into the future. Based on FPC's projections, it will take 14
6 years before the break even point is reached (assuming no return
7 on the additional early payments). The Commission must consider
8 what constitutes a reasonable standard for evaluation of
9 transactions with such widely diverging effects over time.

10 Q. Why do these inter-generational issues concern you?

11 A. Proper regulation must be concerned about issues of inter-
12 generational equity. Customers will move, go out of business, or
13 even die. Alternatively, customers may undertake conservation
14 measures, or self generate to reduce or even eliminate their
15 consumption of electricity. In each of these cases, customers
16 may pay the front end loaded costs of a contract termination, but
17 not be around to enjoy any eventual savings. Further, for quite
18 some time Florida has been an attractive state for older people to
19 move into for retirement and for young people starting out.
20 Individuals who move into FPC's service territory will reap the
21 benefits of contract buy outs without paying any of the costs.
22 More significantly, new customers will substantially dilute the

1 benefits of even those existing customers who do stay around for
2 the entire 29 years.

3 Finally, the Commission should recognize that a buy out
4 transaction can change the assignment of costs among customer
5 classes. In the case at hand, the FPC proposal would result in a
6 substantial increase in fuel costs relative to the current status quo.
7 High load factor customers will find that even under FPC's
8 proposed 100% capacity allocation for the buy out payments, a
9 disproportionate increase in energy costs (and therefore total
10 costs) will occur.

11 **Q. Has the Commission previously indicated that it considers the**
12 **question of inter-generational equity important?**

13 **A. Yes. Concerns over inter-generational equity constituted one of**
14 **the reasons why the Commission refused to approve FPC's**
15 **proposal to recover costs associated with the early termination of**
16 **OCL's power purchase contract over a period of five years.**

17 **Q. Have you analyzed FPC's proposal in light of the Commission's**
18 **concerns?**

19 **A. Yes. Exhibit No. ____ (RJF-2) is an analysis of the economics of the**
20 **Tiger Bay transaction from the perspective of current ratepayers.**
21 **The exhibit is based solely on the Compar;'s economic analysis**
22 **of the project with no adjustments to any of the underlying**

1 assumptions. Along with the exhibit, I present a chart which
2 shows the ratepayers realized Internal Rate of Return (IRR) derived
3 from the transaction.

4 Q. What is an IRR?

5 A. An IRR calculation is a useful tool for examining the attractiveness
6 of investment alternatives. In this case, FPC proposes to charge
7 ratepayers more for the first five years, in order to produce
8 savings for the last 24 years. The question is "What kind of
9 return on investment does the customer derive from this "forced"
10 investment?" The IRR computes this return by finding the interest
11 rate at which the cash flow analysis breaks even. This
12 information can then be used as a basis for comparison. If an
13 investment yields a return higher than other opportunities of
14 comparable risk, then it is attractive.

15 Q. Could you cite some examples of the type of investment
16 opportunities available to customers?

17 A. Mr. Dolan has already cited the idea of an early repayment of a
18 mortgage as one example. In Mr. Dolan's example, the IRR would
19 be approximately equal to the interest rate on the mortgage,
20 perhaps 7-8%. Naturally, some customers will find it more logical
21 to pay off credit card debt (18% or more), while others may have
22 paid off all debts, and prefer to put extra money in money market

1 accounts (5%), long term government bonds (7%) or the stock
2 market (10%). In any event, customers have a wide range of
3 investment opportunities. I will demonstrate that for all but the
4 longest time frames, more attractive returns will be available from
5 more conventional opportunities. Further, conventional
6 opportunities have much lower risk and far greater financial
7 flexibility.

8 Q. Please discuss the results of your analysis.

9 A. Exhibit No. ____ (RJF-2) differentiates the results for ratepayers
10 over time. In the first part of the analysis, the effect of new
11 customers absorbing the benefits of existing customers is ignored.
12 Even under this approach, the transaction takes a very long time
13 to produce net benefits. It would take 14 years before the higher
14 costs in the first 5 years are returned (without interest) to
15 ratepayers. This is quite significant. It means that any existing
16 customer who leaves the system for any reason during the first 14
17 years will lose money, no matter what happens. It appears that
18 in the current case customers will have to wait 14 years to break
19 even (at a zero percent interest rate.)

20 Q. How long does it take before the transaction yields a return
21 comparable to a money market account or repayment of a
22 mortgage?

1 **A.** The IRR after 16 years is only 4.6%. After 18 years the realized
2 return is 7.4%, while it takes 19 years to achieve a 8.5% IRR.

3 **Q.** Does this mean that the FPC proposal would be equal to that
4 which a customer might get by paying off his mortgage?

5 **A.** Hardly. If a person pays off a mortgage and then moves or sells
6 the house, the person will receive the benefits of the earlier
7 investment. Alternatively, prepayment of a mortgage creates
8 equity in the home which can be used to secure an equity credit
9 line. No such financial flexibility would exist for this transaction.
10 This is not a savings account that customers can count on for a
11 rainy day.

12 **Q.** What is the total return from this transaction over the entire 29
13 years?

14 **A.** Ignoring the dilution of benefits from customer growth, the total
15 return for the entire transaction period is 12.84%. This would
16 place it a little below the allowed high end for FPC's rate of return
17 on equity and a little below the actual returns realized by FPC
18 shareholders (over 14%) during the past 15 years. Therefore, it
19 would make sense for FPC's shareholders to finance the
20 transaction, particularly because we assume that at least some of
21 the cost of the buy out payments will come from borrowed funds.

22 Returning to the customers' perspective, we know that if a

1 customer chooses to invest in Florida Progress stock, he or she
2 would always have the option to sell the investment when a better
3 opportunity came along. While 12.84% appears to be an
4 attractive return, it is quite misleading because of the 29 years
5 required to realize this return, the aforementioned risk of losing
6 everything, and the lack of flexibility compared to ordinary
7 investments. Further, these results are for ratepayers as a whole
8 and make no distinction between costs paid by existing ratepayers
9 and benefits derived by new ratepayers. After accounting for the
10 dilution of benefits, existing ratepayers will not do as well, and in
11 fact many will probably never achieve a positive rate of return.

12 Q. Please explain.

13 A. Exhibit 2 also shows the results of this transaction after
14 accounting for the dilution of benefits due to customer growth.
15 I have assumed that customer growth of 2.24% per year occurs
16 and that new customers usage patterns are approximately the
17 same as existing one. This probably works to make the results
18 more attractive to existing customers because the trend towards
19 larger homes indicates that frequently new customers use more
20 energy than the existing ones. Regardless of the exact
21 circumstances, new customers do dilute the eventual benefits
22 which would otherwise be received by existing customers.

1 Q. Isn't it possible in some cases that the new customers are really
2 existing customers?

3 A. True. For example, children will grow up, and absorb some of the
4 benefits paid for by their parents and grandparents. However, I
5 believe that in such cases many parents or grandparents might
6 prefer to have a choice in making this early inheritance available
7 to not only their own children, but everyone else's children as
8 well.

9 Q. Please continue with your discussion of the results shown in
10 Exhibit No. __ (RJF-2).

11 The figures clearly demonstrate that the addition of new
12 customers to the system results in a dilution of the benefits for
13 existing customers to such an extent that many of today's
14 ratepayers will never break even from the transaction and even
15 those who do stay on the system for the entire 29 years will
16 receive less attractive returns than shown in FPC's analysis.

17 Based on the assumed rate of customer growth, this
18 transaction loses customers' money for the first 14 years! Even
19 worse, if a customer leaves the system after 18 years, the return
20 is only 5%. Given the large negative returns for the first 14 years,
21 I doubt if many prudent investors would willingly take on such an
22 investment. Even a customer who stays on the system for the

1 entire 29 years receives a return of only 10.4%, an amount
2 thought by many to be comparable to investing in a mutual fund.
3 However, mutual fund investments are voluntary, and highly
4 liquid. Neither statement is true for FPC's proposal.

5 These results, are, of course, highly dependent on the
6 customer's age. For customers over the age of 60, there is a high
7 probability that this will be a rather poor retirement investment.
8 Even for 40 year olds, the mortality tables indicate that around
9 20% will not survive the entire 29 years. In addition, we are now
10 living in a highly mobile society. Younger people, who have better
11 odds on the mortality tables still may not be around long enough
12 to benefit from this transaction due to relocation. I don't believe
13 the Commission should force ratepayers to take this bet. This is
14 particularly true because, as I will explain shortly, the opportunity
15 exists, to reform this transaction to eliminate most of these
16 problems and still retain the longer term benefits.

17 Q. Your analysis uses the figures contained in FPC's Exhibit B. This
18 appears comparable to Mr. Dolan's Exhibit RDD-4, page 1 of 4.
19 Why don't you rely on his other scenarios which reflect the
20 Company's representations that it will not seek to immediately
21 recover the O&M and other costs associated with the Tiger Bay
22 plant?

1 A. The O&M and other costs referenced are real costs and should be
2 included as part of any economic analysis. In addition, the
3 Company has made no guarantee it will not seek a base rate case
4 over the next six years (as shown in RDD-4, page 2 of 4) and it
5 certainly stretches Mr. Dolan's credibility when he assumes that
6 the Company would never have a base rate case or otherwise
7 recover these costs over the next 29 years (as shown on page 3
8 of 4). Further, based on year end 1996 surveillance reports, FPC
9 is now earning over its mid-point rate of return (a 12.3% ROE was
10 reported). It would certainly be possible for a complaint case to
11 be filed leading to a reduction in FPC's rates, or for FPC's ROE to
12 exceed the current high end (13%), triggering rate reductions. In
13 the end, customers are liable for paying these costs even if FPC
14 does not have immediate plans for a base rate case. In any case,
15 using the assumptions shown on RDD-4, page 2 of 4 (no rate
16 recovery for six years) would move the break-even point back only
17 two years.

18 Q. Your analysis focusses on the impacts on current customers. Do
19 you believe that as a matter of policy the Commission should
20 favor current ratepayers over future ones?

21 A. Good regulatory policy dictates that regulators should consider
22 what is in the best interests of all ratepayers over time. However,

1 this is clearly a question of equity and proportionality. In the case
2 at hand, we are not talking about a total sacrifice of future
3 ratepayers to enrich existing ones. What we are really asking is
4 how much should current ratepayers be expected to sacrifice in
5 order to benefit themselves and other customers in the future, or
6 whether current ratepayers should take this extraordinary step for
7 no purpose other than as an altruistic gift to future generations.

8 In addition, it should be borne in mind that this is an
9 optional transaction. This is not like the case of building a new
10 power plant which will be needed and used by all customers, both
11 existing and new ones. Rather, this is a case where the resource
12 is already in place and we are considering the financial
13 implications of a re-ordering of the associated costs over time. As
14 noted above, the resource is priced on the basis of coal-fired
15 generation. It is entirely possible (though it now appears unlikely)
16 that once the current gas contract expires, if gas prices have
17 increased, customers might rather have a resource priced on the
18 basis of a coal-fired equivalent. Thus, future ratepayers might
19 benefit even if the transaction were turned down. In addition, by
20 selection of a coal-fired resource as the avoided unit over gas-fired
21 plants in the first place, the Commission was already acting in a
22 manner to minimize long run, rather than short run, costs. Had

1 the Commission used a gas plant as the proxy avoided unit,
2 current contract prices for capacity could be much lower owing to
3 the lower initial capital costs of such plants.

4 Finally, I am not suggesting that the Commission flatly
5 reject the proposal. Rather, I would support it, but only if some
6 means is developed to address the issues of inter-generational
7 equity.

8 **Q. How do you propose to address these concerns?**

9 **A.** I believe that the potential exists for buy out transactions such as
10 Tiger Bay to be largely "self financed." FPC already has
11 authorization from the Commission to collect the capacity and
12 energy charges from the Tiger Bay contract via the fuel and
13 capacity clauses. First, I suggest that the Commission segregate
14 the buy out costs related to acquisition of the power plant
15 (\$162.7 million) and then require FPC to defer the remaining
16 termination charges. The Company would then be allowed to
17 retain the capacity and energy revenues from the current contract
18 and use them to offset the charges from the contract termination.
19 Exhibit No. ___ (RJF-3) summarizes the results of this analysis. It
20 demonstrates that the deferral balances could be eliminated in
21 about twelve years, based on FPC's projections.

22 **Q. Please explain your views concerning the rate treatment of the**

1 **\$162.7 million portion of the payments related to the purchase of**
2 **the power plant which you made in point 3.**

3 A. **Actually I must say that I am astounded by FPC's proposal to**
4 **require ratepayers to pay the cost of the new power plant as part**
5 **of the capacity charge over the next five years. I doubt if anyone**
6 **would consider it reasonable for ratepayers to pay the**
7 **construction costs of a new power plant in this manner. I am**
8 **aware of no such case in the history of regulation. While the**
9 **Commission has occasionally allowed CWIP in rate base, this only**
10 **requires ratepayers to pay the carrying costs of plants under**
11 **construction and has only been permitted in cases where it was**
12 **needed to preserve the utility's financial integrity. That is a far cry**
13 **from having the ratepayers actually fund the entire cost of**
14 **construction. I see no distinction between this situation, where**
15 **FPC is acquiring an asset as part of a contract termination, and**
16 **the more ordinary case where a utility builds a new plant. This**
17 **proposal by FPC is totally unjustified and unreasonable in my**
18 **view.**

19 Q. **Would it be reasonable to make a distinction in this case because**
20 **the plant is already running?**

21 A. **No. Recently Florida Power & Light Company purchased Scherer**
22 **Unit 4 from Georgia Power Company. In that case, the**

1 Commission required the Company to follow conventional
2 accounting practices, and most certainly did not require the
3 ratepayers to pay for the cost of the new plant over an
4 accelerated time frame via the capacity clause.

5 **Q. FPC proposes to create a regulatory liability as an offset in future**
6 **rate proceedings to account for the early recovery of the plant's**
7 **cost. Why isn't this an adequate mechanism?**

8 **A. FPC's proposal stands regulation on its head. Normally, the**
9 **investors own the assets and the ratepayers pay the investors for**
10 **the cost of using those assets, including a return on investment.**
11 **FPC's proposal reverses the procedure. The ratepayers pay for**
12 **the asset, then the investors credit the ratepayers for the cost of**
13 **capital. Strangely enough, the shareholders will still be the**
14 **owners of the asset, even after the ratepayers pay for it. Let us**
15 **not forget that under conventional rate base treatment FPC's**
16 **shareholders would benefit from ownership of this plant. They**
17 **would be entitled to receive a return on investment, assuming it**
18 **passes the pertinent regulatory tests. Further, ownership of an**
19 **efficient new plant would allow the Company to profitably serve**
20 **customer growth in the future.**

21 **Q. Based on this discussion it appears that you believe FPC should be**
22 **afforded conventional rate treatment for the asset. Explain in**

1 **more detail how you would propose to accomplish that.**

2 **A. The first step would be to require FPC to differentiate its payments**
3 **between the amount required to purchase the plant and the**
4 **amounts used to terminate the contract. I suggest that the first**
5 **\$162.7 million (NPV) in payments be applied to the purchase of**
6 **the plant. This makes sense because the Company will receive**
7 **title to the plant immediately, and have this asset on its books at**
8 **the completion of the transaction. All subsequent payments**
9 **should be assumed by the Commission to be an expense item**
10 **related to the contract termination. FPC should be allowed to**
11 **include the plant and its associated costs in surveillance reports.**
12 **However, with the next general rate filing, the Company must**
13 **demonstrate the need for and prudence of the facility if it seeks**
14 **conventional rate recognition.**

15 **Q. Explain the regulatory accounting of the contract termination**
16 **related charges.**

17 **A. FPC should be allowed to continue to collect an amount equivalent**
18 **to the revenues for capacity and energy charges associated with**
19 **the current contracts. All funds received should be credited**
20 **against the termination charges. In 1997 and 1998, when all**
21 **transaction costs are assigned to the plant purchase, FPC would**
22 **recover all fuel and operating costs plus a surplus. In the years**

1 1998 to 2002, as the plant purchase payments end and contract
2 termination charges begin, shortfalls will exist. After 2002, FPC
3 will have surpluses every year. All shortfall and surpluses should
4 be accumulated, with carrying charges computed at FPC's cost of
5 capital. Eventually, the cost of the contract termination will be
6 eliminated and FPC should then eliminate collection of the
7 contract-equivalent charges. In this way, the Company will be
8 made whole.

9 **Q. Utility accounting standards have become quite restrictive in**
10 **recent years. Does the possibility that FPC's CPAs may not allow**
11 **the Company to report the regulatory asset created under this**
12 **proposal concern you?**

13 **A. No. The accountants' role is to record transactions, not to decide**
14 **which ones take place. Investors can be made aware of this rate**
15 **treatment even if FPC cannot report the regulatory asset for**
16 **financial accounting purposes. However, I believe that this raises**
17 **an excellent point concerning the ultimate benefits of this**
18 **transaction which should be carefully considered by the**
19 **Commission.**

20 **Q. Please explain.**

21 **A. I have already discussed the fact that ratepayers stand to lose**
22 **under the FPC proposal if for any reason they leave the system**

1 prior to the end of the contract term. In all likelihood, few of
2 today's customers will be on the system 20 years from now.
3 However, we must assume that in some form FPC will be around
4 until the year 2026 (and beyond). Thus, FPC is in a much better
5 position than virtually any of its customers to realize the benefits
6 of this transaction. If FPC's accountants (or lenders or other
7 investors) do not consider this to be a worthy investment, then
8 what should that tell the ratepayers? Or the Commission, for that
9 matter? If FPC balks at the accounting implications of my
10 proposal, then it would appear they consider this investment to be
11 viable only if it can be financed with other people's money. The
12 Commission should flatly reject this proposal.

13 **Q. Please discuss your concerns regarding the cost of service**
14 **implications of this transaction.**

15 **A. Under FPC's proposal, the energy component of the contract**
16 **(based on the cost of coal) will be replaced with the actual cost of**
17 **gas under the Vestar contract. This will substantially increase the**
18 **costs recovered on energy relative to capacity. For example, in**
19 **1998, the cost of energy under the QF contracts is \$27.3 million,**
20 **compared to \$41.5 million for fuel under the Vestar gas contract.**
21 **This creates a shift in cost from demand to energy which greatly**
22 **disadvantages high load factor customers. Because industrial**

1 loads are generally high load factor, this aspect of the transaction
2 will be detrimental to the climate for industrial expansion in the
3 FPC service area. In addition to the problems discussed above
4 (related to the possibility of leaving the system due to business
5 closure, relocation or self generation), it adds a further handicap
6 to the FPC proposal which makes it virtually impossible that a high
7 load factor customer could ever benefit from this transaction. My
8 rate treatment proposal would maintain the current demand and
9 energy relationships and eliminates this problem.

10 **Q. What are the competitive implications of FPC's proposal?**

11 **A. FPC's proposal is anti-competitive. The Company would like for**
12 **its current ratepayers to subsidize its competitive future. By**
13 **terminating this contract and rapidly obtaining an asset without**
14 **any shareholder investment, the Company would greatly reduce**
15 **its future costs. In addition, FPC seeks to have the ratepayers**
16 **purchase a highly efficient new plant for it. It will then have this**
17 **asset on its books with no original investment and be that much**
18 **better positioned to compete for customers in a competitive**
19 **market. The capital FPC might have dedicated to the purchase of**
20 **this plant will be replaced by FPC's off the books regulatory**
21 **liability: nothing more than an IOU to the ratepayers. If the**
22 **ratepayers are no longer captive, the question is whether FPC's**

1 liability to them would persist. Utilities in other states are now
2 contending that they should receive stranded cost recovery of
3 regulatory assets on the premise they will be uncollectible under
4 competition. This is the "flip side" of the same coin. In any
5 event, FPC will be able to apply the credit resources it conserved
6 in this transaction to the acquisition of additional plants. This will
7 place the Company at an advantage relative to possible
8 competitors.

9 FPC suggests that the Tiger Bay contract may be part of the
10 so called "stranded costs" which it assumes ratepayers will bear
11 in the transition to competition. However, there is no evidence
12 that FPC will have positive stranded costs in the first place. When
13 competition becomes a reality, the shareholders may walk away
14 with this substantial windfall. In any event, the Company is not
15 proposing competition at this time, so it is premature to allow this
16 expedited (and unprecedented) cost recovery on the basis of such
17 considerations.

18 Q. Discuss your point 4 concerning the relationship of contract
19 terminations and DSM.

20 A. Utility regulation seems to have adopted the concept that you
21 "have to spend money to make money" with a vengeance.
22 Unfortunately, it is the ratepayers' money which is being spent.

1 DSM has been touted as a means of spending ratepayer money to
2 save ratepayer money. FPC's proposal amounts to the same
3 thing. Unfortunately, there is a limit on how much ratepayers can
4 afford to spend to save money, particularly in light of the
5 uncertain savings available from these schemes. Capital is a
6 scarce resource and should be rationed to the most productive
7 investments. I suggest that if the Commission does not accept
8 my ratemaking proposals for this proceeding, and still approves
9 the transaction, it should re-examine the cost/benefit analyses of
10 current DSM projects to see if any fall short of the potential
11 returns from the contract termination proposal. If so, then the
12 funds used to pay for the Tiger Bay transaction should be offset
13 by elimination of less cost-effective DSM options. If, on the other
14 hand, all DSM projects are more cost-effective, then the proposed
15 Tiger Bay transaction should be tabled.

16 Q. Finally, please discuss your point 5 regarding the recovery of
17 termination costs via automatic adjustment clauses, in the case of
18 a utility earning above its low range ROE.

19 A. Again, this concept would apply only in the case that the
20 Commission does not adopt my main proposal. To the extent that
21 a utility is earning above its low end ROE, the Commission is
22 permitting the shareholders to collect a rate of return which falls

1 within the reasonable zone. In light of the questionable long term
2 cost/benefit relationships of possible transactions in general (and
3 this one specifically), customer rates should not be further
4 elevated by automatic adjustment clauses in cases where
5 shareholders are already earning reasonable returns. Costs
6 allowed for automatic adjustment clauses should be reduced to
7 the extent that the ROE is brought to the low end of the
8 reasonable zone. This does not mean that such costs are not fully
9 recoverable. It simply means that full pass-through recovery
10 should not be extended automatically. The utility could always
11 seek to recover these costs in base rates, and institute a full
12 proceeding if it finds the low end ROE unacceptable.

13 **Q. Wouldn't this amount to a "back-door" rate reduction?**

14 **A. Absolutely not. Recall that FPC is seeking extraordinary rate**
15 **treatment (via the capacity surcharge) under its proposal. The**
16 **termination charges do not fit within the ordinary definition of**
17 **capacity charges, thus they would not otherwise be eligible for**
18 **automatic recovery. This proposal simply ameliorates the**
19 **situation by requiring the utility shareholders to accept a slightly**
20 **lower rate of return in exchange for this extraordinary (and**
21 **generous) rate treatment.**

22 **Q. Can you provide an analysis which demonstrates how substantial**

1 the Tiger Bay request and other recent FPC requests for automatic
2 adjustment clause recovery are in relation to the Company's
3 history of base rate increase?

4 A. Yes. This and other recent FPC requests for automatic adjustment
5 clause recovery are quite substantial, by any measure. This
6 transaction amounts to a request for approximately \$60 million in
7 immediate rate relief in addition to FPC's recent award for fuel
8 under-recovery of \$90 million stemming from the Crystal River 3
9 shutdown and, yet another request for an increase in the capacity
10 surcharge of \$30 million. These automatic adjustment clause
11 increase requests total over \$175 million, an amount far greater
12 than any base rate award FPC has received in any rate case since
13 1981. See Exhibit No. ____ (RJF-4). Considering the
14 extraordinary nature of these recent requests, FPC's earned ROE
15 of 12.3% should be viewed with concern by the Commission.
16 Were FPC to attempt to justify a base rate increase of such
17 magnitude, a far more detailed and exhaustive regulatory
18 procedure would be required, and FPC would naturally risk
19 adjustments to its allowed ROE.

20 Q. Does this conclude your testimony?

21 A. Yes.

**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

FLORIDA POWER CORPORATION

DOCKET NO. 970096-EQ

**TESTIMONY CONFORMED TO
FLORIDA ADMINISTRATIVE CODE NO. 25-22.048 (4)(a)**

**EXHIBITS
OF
RANDALL J. FALKENBERG**

**ON BEHALF OF THE
FLORIDA INDUSTRIAL POWER USERS GROUP**

**KENNEDY AND ASSOCIATES
ATLANTA, GEORGIA**

FEBRUARY 1997

QUALIFICATIONS OF RANDALL J. FALKENBERG, VICE PRESIDENT

EDUCATIONAL BACKGROUND

I received my Bachelor of Science degree with Honors in Physics and a minor in mathematics from Indiana University. I received a Master of Science degree in Physics from the University of Minnesota. My thesis research was in nuclear theory. At Minnesota I also did graduate work in engineering economics and econometrics. I have completed advanced study in power system reliability analysis.

PROFESSIONAL EXPERIENCE

After graduating from the University of Minnesota in 1977, I was employed by Minnesota Power as a Rate Engineer. I designed and coordinated the Company's first load research program. I also performed load studies used in cost-of-service studies and assisted in rate design activities.

In 1978, I accepted the position of Research Analyst in the Marketing and Rates department of Puget Sound Power and Light Company. In that position, I prepared the two-year sales and revenue forecasts used in the Company's budgeting activities and developed methods to perform both near- and long-term load forecasting studies.

In 1979, I accepted the position of Consultant in the Utility Rate Department of Ebasco Service Inc. In 1980, I was promoted to Senior Consultant in the Energy Management Services Department. At Ebasco I performed and assisted in numerous studies in the areas of cost of service, load research, and utility planning. In particular, I was involved in studies concerning analysis of excess capacity, evaluation of the planning activities of a major utility on behalf of its public service commission, development of a methodology for computing avoided costs and cogeneration rates, long-term electricity price forecasts, and cost allocation studies.

At Ebasco, I specialized in the development of computer models used to simulate utility production costs, system reliability, and load patterns. I was the principal author of production costing software used by eighteen utility clients and public service commissions for evaluation of marginal costs, avoided costs and production costing analysis. I assisted over a dozen utilities in the performance of marginal and avoided cost studies related to the PURPA of 1978. In this capacity, I worked with utility planners and rate specialists in quantifying the rate and cost impact of generation expansion alternatives. This activity included estimating carrying costs, O&M expenses, and capital cost estimates for future generation.

J. KENNEDY AND ASSOCIATES, INC.

QUALIFICATIONS OF RANDALL J. FALKENBERG, VICE PRESIDENT

In 1982 I accepted the position of Senior Consultant with Energy Management Associates, Inc. and was promoted to Lead Consultant in June 1983. At EMA I trained and consulted with planners and financial analysts at several utilities in applications of the PROMOD and PROSCREEN planning models. I assisted planners in applications of these models to the preparation of studies evaluating the revenue requirements and financial impact of generation expansion alternatives, alternate load growth patterns and alternate regulatory treatments of new baseload generation. I also assisted in EMA's educational seminars where utility personnel were trained in aspects of production cost modeling and other modern techniques of generation planning.

I became a Principal in Kennedy and Associates in 1984. Since then I have performed numerous economic studies and analyses of the expansion plans of several utilities. I have testified on several occasions regarding plant cancellation, power system reliability, phase-in of new generating plants, and the proper rate treatment of new generating capacity.

PAPERS AND PRESENTATIONS

Mid-America Regulatory Commissioners Conference - June 1984: "Nuclear Plant Rate Shock - Is Phase-In the Answer"

Electric Consumers Resource Council - Annual Seminar, September 1986: "Rate Shock, Excess Capacity and Phase-in"

The Metallurgical Society - Annual Convention, February 1987: "The Impact of Electric Pricing Trends on the Aluminum Industry"

Public Utilities Fortnightly - "Future Electricity Supply Adequacy: The Sky Is Not Falling" What Others Think, January 5, 1989 Issue

Expert Testimony Appearances
of
Randall J. Falkenberg
As of February 1997

Date	Case	Jurisdiction	Party	Utility	Subject
3/84	8924	KY	Airco Carbide	Louisville Gas & Electric	CVIP in rate base.
5/84	830470-EI	FL	Florida Industrial Power Users Group	Florida Power Corp.	Phase-in of coal unit, fuel savings basis, cost allocation.
10/84	89-07-R	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power	Excess capacity.
11/84	R-842651	PA	Lehigh Valley Power Committee	Pennsylvania Power & Light Co.	Phase-in of nuclear unit.
2/85	1-840381	PA	Phila. Area Industrial Energy Users' Group	Philadelphia Electric Co.	Economics of cancellation of nuclear generating units.
3/85	Case No. 9243	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Economics of cancelling fossil generating units.
3/85	R-842632	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Economics of pumped storage generating units, optimal reserve margin, excess capacity.
3/85	3498-U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Cancellation of nuclear unit, load and energy forecasting, generation planning economics.
5/85	84-768-E-42T	WV	West Virginia Multiple Intervenors	Monongahela Power Co.	Economics of pumped storage generating units, optimal reserve margin, excess capacity.
7/85	E-7, SUB 391	NC	Carolina Industrial Group for Fair Utility Rates	Duke Power Co.	Nuclear unit economics, fuel cost projections.
7/85	9299	KY	Kentucky Industrial Utility Consumers	Union Light, Heat & Power Co.	Interruptible rate.
8/85	84-249-U	AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Prudence review.
1/86	85-09-12	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power Co.	Excess capacity, financial impact of phase-in of nuclear plant.
1/86	R-850152	PA	Philadelphia Area Industrial Energy Users' Group	Philadelphia Electric Co.	Phase-in and economics of nuclear plant.
2/86	R-850220	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Optimal reserve margins, prudence, off-system sales guarantee plan.

Expert Testimony Appearances
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As of February 1997

Date	Case	Jurisdiction	Party	Utility	Subject
5/86	86-081-E-G1	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Generation planning, economics prudence of a pumped storage hydro unit.
5/86	3554-U	GA	Attorney General Georgia Public Service Commission Staff	Georgia Power Co.	Cancellation of nuclear plant.
9/86	29327/28	NY	Occidental Chemical Corp.	Niagara Mohawk Power Co.	Avoided cost, production cost models.
9/86	E7-Sub 408	NC	NC Industrial Energy Committee	Duke Power Co.	Incentive fuel adjustment clause.
12/86	9437/613	KY	Attorney General of Kentucky	Big Rivers Electric Corp.	Power system reliability analysis, rate treatment of excess capacity.
5/87	86-524-E-8C	WV	West Virginia Energy Users' Group	Monongahela Power	Economics and rate treatment of Bath County pumped storage County Pumped Storage Plant.
6/87	U-17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Prudence of River Bend Nuclear Plant.
6/87	PUC-87-013-RD E002/E-015 -PA-86-722	MN	Eveleth Mines & USX Corp.	Minnesota Power/Northern States Power	Economics of sale of generating unit and reliability requirements.
7/87	Docket 9885	KY	Attorney General of Kentucky	Big Rivers Electric Corp.	Financial workout plan for Big Rivers.
8/87	3673-U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Nuclear plant prudence audit, Vogtle buyback expenses.
10/87	R-850220	PA	MPP Industrial Intervenors	West Penn Power Co.	Need for power and economics, County Pumped Storage Plant
10/87	870220-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Cost allocation, interruptible rate design.
10/87	870220-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Nuclear plant performance.
1/88	Case No. 9934	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Review of the current status of Trimble County Unit 1.

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Date	Case	Jurisdct.	Party	Utility	Subject
3/88	870189-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Methodology for evaluating interruptible load.
5/88	Case No. 10217	KY	National Southwire Aluminum Co., ALCAN Alum Co.	Big Rivers Electric Corp.	Debt restructuring agreement.
7/88	Case No. 325224	LA 19th Div I Judicial District	Louisiana Public Service Commission Staff	Gulf States Utilities	Prudence of River Bend Nuclear Plant.
10/88	3780-U	GA	Georgia Public Service Commission Staff	Atlanta Gas Light Co.	Weather normalization of gas sales and revenues.
10/88	3799-U	GA	Georgia Public Service Commission Staff	United Cities Gas Co.	Weather normalization of gas sales and revenues.
12/88	88-171-EL-AIR 88-170-EL-AIR	OH OH	Ohio Industrial Energy Consumers	Toledo Edison Co., Cleveland Electric Illuminating Co.	Power system reliability reserve margin.
1/89	1-880052	PA	Philadelphia Area Industrial Energy Users' Group	Philadelphia Electric Co.	Nuclear plant outage, replacement fuel cost recovery.
2/89	10300	KY	Green River Steel Co.	Kentucky Utilities	Contract dispute, interruptible rates.
3/89	P-870216 283/284/286	PA	Armco Advanced Materials Corp., Allegheny Ludlum Corp.	West Penn Power Co.	Reserve margin, avoided costs.
5/89	3741-U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Prudence of fuel procurement.
8/89	3840-U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Need and economics of coal and nuclear capacity, power system planning.
10/89	2087	NH	Attorney General of New Mexico	Public Service Co. of New Mexico	Power system planning, economic and reliability analysis, nuclear planning, prudence.
10/89	89-128-U	AR	Arkansas Electric Energy Consumers	Arkansas Power Light Co.	Economic impact of asset transfer and stipulation and settlement agreement.

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Date	Case	Jurisdct.	Party	Utility	Subject
11/89	R-891364	PA	Philadelphia Area Industrial Energy Users' Group	Philadelphia Electric Co.	Sale/leaseback of nuclear plant, excess capacity, phase-in construction delay imprudence.
1/90	U-17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Sale/leaseback of nuclear power plant.
4/90	89-1001-EL-AIR	OH	Industrial Energy Consumers	Ohio Edison Co.	Power supply reliability, excess capacity adjustment.
4/90	N/A	N.O.	New Orleans Business Counsel	New Orleans Public Service Co.	Municipalization of investor-owned utility, generation planning, reliability analysis.
7/90	3723-U	GA	Georgia Public Service Commission Staff	Atlanta Gas Light Co.	Weather normalization adjustment rider.
9/90	8278	NY	Maryland Industrial Group	Baltimore Gas & Electric Co.	Revenue requirements, gas and electric CWP in rate base.
9/90	90-158	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Power system planning.
12/90	U-9346 Rebuttal	NI	Association of Businesses Advocating Tariff Equity (ABATE)	Consumers Power Co.	Demand-side management.
5/91	3979-U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Demand-side management, load forecasting, and integrated resource planning.
7/91	9945	TX	Office of Public Utility Counsel	El Paso Electric Co.	Power plant planning, prudence, quantification of damages of imprudence, environmental costs of electricity.
8/91	4007-U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Integrated resource planning, regulatory risk assessment.
11/91	10200	TX	Office of Public Utility Counsel	Texas-New Mexico Power Co.	Imprudence disallowance.
12/91	U-17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Year-end sales and customer adjustment, jurisdictional allocation.
1/92	89-783-E-C	WVA	West Virginia Energy Users Group	Monongahela Power Co.	Avoided costs, reserve margin, power plant economics.
3/92	91-370	KY	Newport Steel Co.	Union Light, Heat & Power Co.	Interruptible rates, design, cost allocation.

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Date	Case	Jurisdiction	Party	Utility	Subject
5/92	91890-E1	FL	Occidental Chemical Corp.	Florida Power Corp.	Incentive regulation, jurisdictional separation, interruptible rate design.
6/92	4131-U	GA	Georgia Textile Manufacturers Assn.	Georgia Power Co.	Integrated resource planning, demand-side management.
9/92	920324-E1	FL	Florida Industrial Power Users Group	Tampa Electric Co.	Cost allocation, interruptible rates decoupling, DSM
10/92	4132-U	GA	Georgia Textile Manufacturers Assn.	Georgia Power Co.	Residential conservation program certification.
10/92	11000	TX	Office of Public Utility Counsel	Houston Lighting and Power Co.	Certification of utility cogeneration project.
11/92	U-19904	LA	Louisiana Public Service Commission Staff	Entergy/Gulf States Utilities (Direct)	Production cost savings from merger.
11/92	8469	MD	Westvaco Corp.	Potomac Edison Co.	Cost allocation, revenue distribution.
11/92	920606	FL	Florida Industrial Power Users Group	Statewide Rulemaking	Decoupling, demand-side management, conservation, performance incentive factor.
12/92	R-009 22378	PA	Arasco Advanced Materials	West Penn Power Co.	Energy allocation of production costs.
1/93	8179	MD	Eastalco Aluminum/ Westvaco Corp.	Potomac Edison Co.	Economics of GF vs. combined cycle power plant.
2/93	92-E-0814 88-E-081	NY	Occidental Chemical Corp.	Niagara Mohawk Power Corp.	Special rates, wheeling.
3/93	U-19904	LA	Louisiana Public Service Commission Staff	Entergy/Gulf States Utilities (Surrebuttal)	Production cost savings from merger.
4/93	EC92 21000 ER92-806-000 (Rebuttal)	FERC	Louisiana Public Service Commission Staff	Gulf States Utilities/Entergy	Merger.
6/93	930055-EU	FL	Florida Industrial Power Users' Group	Statewide Rulemaking	Investigation of proposed stockholder incentives for off-system sales of capacity and energy by investor-owned utilities.
9/93	92-490, 92-490A, 90-360-C	KY	Kentucky Industrial Utility Customers and Kentucky Attorney General	Big Rivers Electric Corp.	Prudence of fuel procurement decisions.

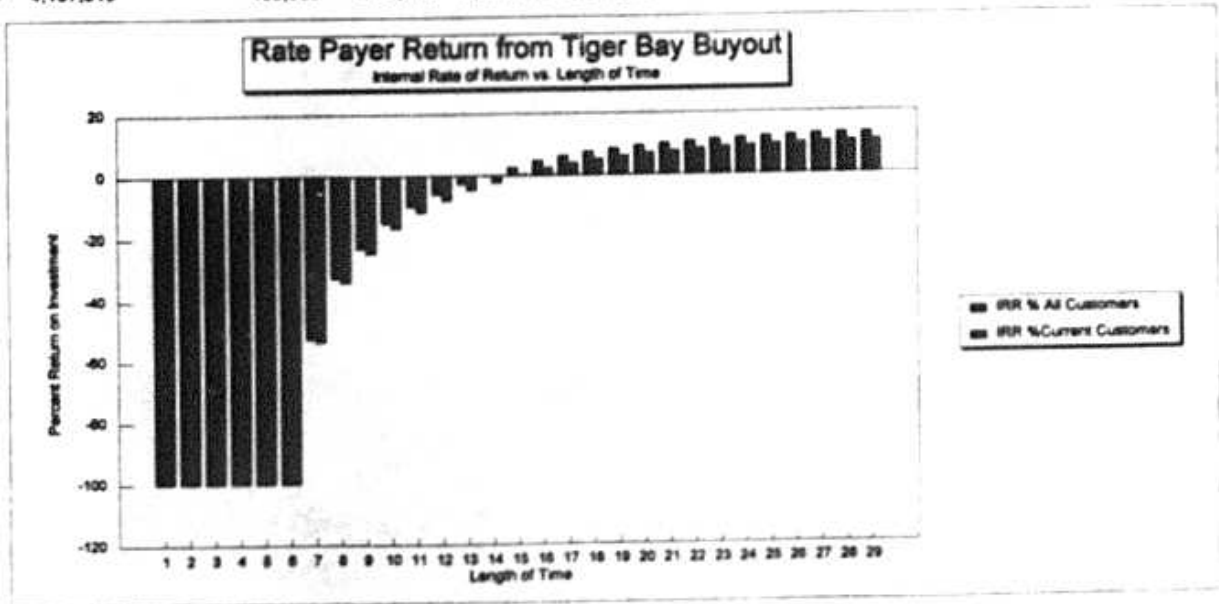
Expert Testimony Appearances
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As of February 1997

Date	Case	Jurisdiction	Party	Utility	Subject
9/93	4152-U	GA	Georgia Textile Manufacturers Assn.	Georgia Power Co.	Allocation of cost of pollution control equipment.
4/94	E-015/ GR-94-001	MN	Large Power Intervenor	Minnesota Power Co.	Analysis of revenue requirements and cost allocation issues.
4/94	93-465	KY	Kentucky Industrial Utility Customers	Kentucky Utilities	Review and critique proposed environmental surcharge.
4/94	4895-U	GA	Georgia Textile Manufacturers Assn.	Georgia Power Co.	Review of purchased power agreement and fuel adjustment clause.
4/94	E-015/ GR-94-001	MN	Large Power Intervenor	Minnesota Power Light Co.	Revenue requirements, incentive compensation.
7/94	94-0035- E-42T	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Revenue annualization, ROE performance bonus, and cost allocation.
8/94	8652	MD	Westvaco Corp.	Potomac Edison Co.	Revenue requirements, ROE performance bonus, and revenue distribution.
1/95	94-332	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Company	Environmental surcharge.
1/95	94-996- EL-AIR	OH	Industrial Energy Users of Ohio	Ohio Power Company	Cost-of-service, rate design, demand allocation of power
3/95	E999-C1 93-583	MN	Large Power Intervenor	Minnesota Public Utilities Commission	Quantification of environmental costs.
4/95	95-060	KY	Kentucky Industrial Utility Customers	Kentucky Utilities Company	Six month review of CAAA surcharge.
11/95	1-940032	PA	The Industrial Energy Consumers of Pennsylvania	Statewide - all utilities	Direct Access vs. Poolco, modeling Poolco, market power.
11/95	95-455	KY	Kentucky Industrial Utility Customers	Kentucky Utilities	Clean Air Act Surcharge.
12/95	95-455	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Company	Clean Air Act Compliance Surcharge.
6/96	960409-E1	FL	Florida Industrial Power Users Group	Tampa Electric Co.	Polk County Power Plant Rate Treatment Issues.

Exhibit No. (RJF-2)

Economic Analysis of Tiger Bay Proposal

Year	Existing Contract	FPC /Tiger Bay Proposal				All Ratepayers		Ratio of Total to Current No. Of Customers 2.24% Gr	Existing Customers as % of Total	Cost/Benefit for Existing Customers	Current Ratepayers Internal ROR
		Fuel Cost	Base Rat Costs	Transaction Cost	Net Buy Out Cost	Net Savings	Internal ROR				
Total	472425	239544	98756	488110							
1 1997	37,931	20,947	5,776	48,811	75,534	(37,603)	-100.00%	100.00%	(37,603)	-100.00%	
2 1998	78,447	41,486	21,506	97,822	160,814	(82,167)	-100.00%	102.24%	(80,365)	-100.00%	
3 1999	82,193	42,099	15,414	97,822	155,135	(72,942)	-100.00%	104.54%	(69,777)	-100.00%	
4 2000	87,804	44,580	16,859	97,822	159,061	(71,257)	-100.00%	106.88%	(66,870)	-100.00%	
5 2001	90,998	44,529	20,770	97,822	162,921	(71,925)	-100.00%	109.28%	(65,819)	-100.00%	
6 2002	95,054	45,903	16,431	48,811	111,145	(16,091)	-100.00%	111.73%	(14,402)	-100.00%	
7 2003	99,808	47,225	15,070	0	62,295	37,513	-52.57%	114.23%	32,839	-53.61%	
8 2004	105,228	48,703	16,780	0	65,483	39,745	-32.37%	116.80%	34,029	-33.86%	
9 2006	103,086	50,235	21,199	0	71,434	31,852	-23.10%	119.42%	26,506	-24.78%	
10 2006	108,359	51,723	13,789	0	85,492	42,867	-15.02%	122.09%	35,574	-7.93%	
11 2007	113,331	53,361	17,362	0	70,723	42,608	-9.78%	124.83%	41,524	-2.25%	
12 2008	119,336	55,064	18,868	0	73,932	45,404	-5.86%	127.63%	60,746	0.30%	
13 2009	124,670	56,833	12,525	0	69,358	55,312	-2.49%	130.49%	68,125	2.34%	
14 2010	131,228	58,670	17,157	0	75,827	55,401	-0.06%	133.42%	79,729	7.60%	
15 2011	136,914	37,397	16,651	0	54,048	82,866	2.54%	136.41%	88,382	8.20%	
16 2012	144,557	37,975	11,596	0	49,541	95,018	4.63%	139.47%	88,557	8.70%	
17 2013	151,542	38,588	16,127	0	54,893	96,849	6.18%	142.60%	89,425	9.11%	
18 2014	159,419	39,168	15,408	0	54,578	104,843	7.43%	145.80%	100,081	9.49%	
19 2015	167,581	39,782	14,087	0	53,869	113,712	8.47%	149.07%	101,050	9.81%	
20 2016	176,286	40,409	15,281	0	55,690	120,598	9.32%	152.41%	106,797	10.10%	
21 2017	185,528	41,048	20,239	0	61,287	124,241	10.01%	155.83%	113,199	10.36%	
22 2018	195,302	41,699	12,789	0	54,488	140,814	10.63%	159.32%	119,336	10.37%	
23 2019	205,642	42,364	19,021	0	61,385	144,257	11.14%	162.90%			
24 2020	216,603	43,042	24,622	0	67,664	148,939	11.56%	166.55%			
25 2021	228,225	43,734	14,066	0	57,800	170,425	11.95%	170.29%			
26 2022	240,527	44,439	20,154	0	64,593	175,934	12.26%	174.11%			
27 2023	253,568	45,159	14,739	0	59,898	193,670	12.57%	178.01%			
28 2024	267,396	45,893	15,478	0	61,371	206,025	12.83%	182.00%			
29 2025	80,958	46,642	23,641	0	70,263	10,875	12.84%	186.08%			
Total =	4,167,519	483,355	488,110	2,260,140	1,927,379	12,844					



**Exhibit No. ____ (PLF-3)
Illustration of Deferral and Recovery of Tiger Bay Termination Costs**

Year	Cal Year	FPC Cost of Capital @ 8.55%	TOTAL		FPC Receipts Based on Current Contract Terms										Plant Ownership Costs										Payments Assigned to Plant Purchase										Payments Assigned to Termination									
			BUY	OUT	Total Rev	Energy	Capacity	Other	O&M	Other	Fuel	Margins	Normal	NPV	Acc NPV	Normal	Less Margins	NPV	Acc NPV																									
1	1987	81.87%	46811	217631	13787	24733	-408	5778	20347	11208	46811	44842	44842	0	-11208	-10297	-10297																											
2	1988	84.49%	97822	79447	27282	52504	-1339	21508	41488	15455	97822	82303	127238	0	-15455	-13044	-23041																											
3	1989	77.54%	97822	82163	27877	55666	-1470	15414	42098	24680	45782	35508	182742	45782	27150	21051	-2289																											
4	2000	71.23%	97822	87804	30335	59073	-1804	18888	44880	28368	97822	71357	50788	88470	71357	50788	48470																											
5	2001	65.44%	97822	90988	30083	62651	-1748	20770	44028	25887	97822	71825	47088	80539	71825	47088	80539																											
6	2002	60.12%	46811	95054	30487	66438	-1881	16431	45903	32720	46811	18091	8674	105213	18091	8674	105213																											
7	2003	55.23%		98608	31288	70465	-2005	15070	47225	37513		-39748	-20720	64028		-20720	64028																											
8	2004	50.74%		105228	32888	74778	-2248	16780	48702	38748		-21882	-14755	48071		-14755	48071																											
9	2005	46.82%		103088	28018	77200	-2124	21188	50235	31882		-21882	-16784	48071		-16784	48071																											
10	2006	42.83%		108359	28778	81880	-2309	13788	51723	42887		-2309	-18308	31212		-18308	31212																											
11	2007	38.34%		113331	29305	88877	-2851	17382	53261	42888		-2851	-18784	14448		-18784	14448																											
12	2008	34.15%		119338	30251	82158	-3070	18888	55054	45804		-3070	-18841	18841		-18841	18841																											

**History of FPC Base Rate Cases and Surcharge Requests: 1961-1997
Annualized (\$1000)**

Year	Docket	Order	Cause	Company Request	Granted (Thousands)
1961	6414-EU	3324	Overearning		(\$1,250) Reduction mandated
1971	71370-EU	5619	Growth	\$19,934	\$ 1,796
1974	74806-EU 74807-EU	6794	Growth	\$65,600	\$ 45,081
1977	770316-EU	8160	Nuclear Plant	\$62,325	\$ 59,468
1980		9451	Cost of Capital	\$99,000	\$ 58,400
1982	820100-EU	11628	New Const. Inc. ROE to 18%	\$169,225	\$ 111,330
1984	830470-EU	13771	Crystal River # 5	\$138,203	\$ 93,35
1987	870220-EI	18627	Customer overearning Complaint		(\$140,000) reduction mandated
1992	910890-EI	PSC-92- 1197 FOF-EI	Central Florida Generators	\$145,853	\$ 85,757 3 year phase in
1997	970001-EI 970097-EI	Pending Pending	Nuc/fuel loss Cap Surchg Tiger Bay	\$102,174 \$ 30,000 \$ 60,635	?

During the study period, the Florida Power rate base has grown from \$542 million on January 1, 1972 to \$3.3 Billion on December 31, 1996.

Over the 36-year period from 1961 to 1996 the base rate increases granted to FPC have been approximately \$314 Million in total. The proposed surcharge increase for the year 1997 alone is \$192 Million for two of the four cost recovery mechanisms. For the annualized period, FPC has requested an astounding \$308 Million in capacity charges.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Direct Testimony and Exhibits of Randall J. Falkenburg on behalf of the Florida Industrial Power Users Group has been furnished by *Hand Delivery, **Federal Express or U.S. Mail to the following this 21st day of February, 1997:

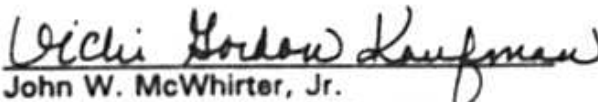
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