

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

**DOCKET NO 891345-EI**

**REBUTTAL TESTIMONY  
AND EXHIBITS  
OF  
M. W. HOWELL**

**Gulf Power**



**DOCUMENT NUMBER-DATE**

**04459 MAY 21 1990**

**FPSC-RECORDS/REPORTING**

GULF POWER COMPANY

Before the Florida Public Service Commission  
Rebuttal Testimony of  
M. W. Howell  
Docket No. 891345-EI  
Date of Filing May 21, 1990

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

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

Q. Are you the same M. W. Howell who has previously testified in this docket?

A. Yes.

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

A. Yes. My exhibit consists of nine schedules to which I will refer. This exhibit was prepared under my supervision and direction.

Counsel: We ask that Mr. Howell's exhibit, comprised of nine schedules, be marked for identification as Exhibit \_\_\_\_\_ (MWH-2).

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FPSG-RECORDS/REPORTING

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

3 A. The purpose of my testimony is to rebut portions of the  
4 testimony of Witnesses Johnson, Rosen, Schultz, and  
5 Wright. These issues relate to inclusion of Scherer in  
6 the rate base, bulk power sales efforts, Scherer  
7 transmission line "rental" expenses, and the system  
8 planning aspects of cost of service methodology.

9 I will demonstrate that the Scherer capacity was  
10 prudently acquired and results in long-term lower costs  
11 to our customers, that Gulf has marketed off-system  
12 power to the maximum extent possible, that the Scherer  
13 transmission "rental" amount submitted by Gulf is  
14 correct, and that the equivalent peaker method of cost  
15 allocation and dedicated facility philosophy proposed  
16 by Mr. Wright are based on flawed assumptions and  
17 reasoning.

18 Office of Public Counsel's witness, Mr. Rosen, has  
19 recommended that Gulf's 63 mw of Scherer Unit No. 3  
20 should not be included in the rate base. Mr. Rosen  
21 used incorrect numbers and flawed reasoning in his  
22 calculations which led him to this conclusion. I will  
23 show how the numbers he used are wrong, leading him to  
24 wrong conclusions, and resulting in his unsupported  
25 recommendation. I will also demonstrate that

1 Mr. Rosen is recommending that the Florida Public  
2 Service Commission (Commission) completely reverse  
3 previous decisions it has made related to the prudence  
4 of Gulf's participation in Plant Scherer and the unit  
5 power sales, and that Mr. Rosen has violated virtually  
6 every basic principle of prudence determination.

7 Mr. Rosen also raised a number of side issues in  
8 unsuccessfully trying to show a lack of need for  
9 Scherer. But he carefully avoided the only question  
10 that is pertinent:

11  
12 Was Gulf prudent in having entered into the  
13 agreement in 1984 to purchase Scherer? The answer is  
14 either yes, or no.

15  
16 Gulf could have acquired Scherer, or not acquired  
17 Scherer. There is no middle ground. If we had not  
18 acquired it, it would not be an issue here. When we  
19 did acquire it, the purchase was completed in 1984, and  
20 the capacity will be there for 40 years as a resource  
21 that must be paid for by someone. I will show that the  
22 decisions related to the Scherer purchase were prudent  
23 and that Scherer is a long term benefit to our  
24 customers.

25



1 Q. Should the Commission allow Scherer capacity to be  
2 included in retail rates?

3 A. Yes. The Commission has not only previously recognized  
4 the long term value of this resource to our customers,  
5 but has also encouraged us to participate in Scherer to  
6 be able to make off system sales to Florida such that  
7 it will reduce Florida's dependence on oil while the  
8 sales are in effect. If the Commission reverses its  
9 stand on Scherer, this will represent not only a  
10 decided blow to our territorial customers in the long  
11 term, but will also represent a serious breakdown in  
12 the regulatory compact.

13  
14 Q. You stated that the Commission has previously  
15 recognized the long-term value of Scherer to your  
16 customers. When did that take place?

17 A. We initially reviewed our plans regarding Scherer with  
18 the Commission in October, 1978, when we held a  
19 workshop to review with them the customer savings which  
20 we could secure by purchasing Scherer capacity in lieu  
21 of the Caryville generation, which was in the early  
22 planning and construction stages. At that workshop,  
23 the Commission indicated that they agreed with Gulf  
24 that it was the proper course of action to secure the  
25 Scherer capacity.

1           During Gulf's next rate case in 1980, in Docket No.  
2           800001-EU, the Commission expressed definite concern  
3           that, since Gulf did not have a guarantee from Georgia  
4           that Georgia would sell the capacity to Gulf, Gulf  
5           might not be able to secure the Scherer capacity and  
6           bring about these savings to its customers. The  
7           Commission acknowledged that Scherer was a good deal  
8           for Gulf's customers, and felt so strongly about the  
9           need to acquire the capacity that it made the Caryville  
10          cancellation cost recovery subject to completion of a  
11          contract for the Scherer capacity.

12           In Gulf's next rate case, Docket No. 810136-EU,  
13          Order No. 10557 stated that Gulf's decisions regarding  
14          Scherer were based on the long-term best interests of  
15          our customers and would result in cost savings because  
16          of our participation in Scherer. In our next rate  
17          case, Docket No. 820150-EU, Order No. 11498 stated that  
18          the Unit Power Sales contracts, of which Scherer was a  
19          significant part, would cause our customers to "benefit  
20          handsomely" from the sales.

21           In addition to these direct statements by the  
22          Commission in the orders, Gulf has also presented its  
23          plans regarding Scherer acquisition in the third 500KV  
24          line hearing in 1982, in which the Commission clearly  
25          encouraged Gulf and Southern to make additional unit

1 power sales from Scherer and other units. Also, Gulf  
2 has presented its plans regarding Scherer at the 1982  
3 Annual Planning Workshop, the 1983 Annual Planning  
4 Workshop, the 1984 Annual Planning Workshop, our 1984  
5 rate case, Docket No. 840086-EU, the 1985 Annual  
6 Planning Workshop, the 1986 Annual Planning Hearing,  
7 and the 1989 Annual Planning Hearing. Also, since the  
8 late 1970's, Gulf has annually filed its Ten Year Site  
9 Plan with the Commission detailing our future expansion  
10 plans including Scherer, our expected generation  
11 percent reserves, and our associated off-system sales.

12 We have openly communicated with both the  
13 Commission and the Staff over the last 12 years  
14 regarding our plans. In not one single instance has  
15 the Commission ever expressed any reservation or  
16 concern over Gulf sharing in the Scherer capacity. We  
17 have also heeded the Commission's urging to maximize  
18 unit power sales out of the Scherer capacity, since it  
19 was recognized from the beginning of the unit power  
20 sales concept that this would help to minimize customer  
21 revenue requirements in the early years of the  
22 capacity.

23  
24  
25

1 Q. Why did Gulf purchase capacity in Plant Scherer?

2 A. The plan to participate in Plant Scherer began in 1978  
3 as an opportunity to cancel proposed construction plans  
4 for a coal-fired plant at Caryville, Florida. It was  
5 determined that the participation in ownership of Plant  
6 Scherer would, at that time, save Gulf's customers over  
7 \$350 million in capital costs. At that time,  
8 commitments had already been made for the installation  
9 of Caryville No. 1 as a 500 mw unit in 1985. Because  
10 of commitments previously made with the suppliers for  
11 Caryville Unit 1, cancellation and deferral charges  
12 were originally estimated to be approximately \$20  
13 million. As a result of intensive negotiations with  
14 vendors, we were able to reduce these charges by  
15 several million dollars by June, 1979, and we then  
16 began writing off the cost over a five year period.

17 This Commission approved the cancellation and  
18 amortization in a prior rate case, Docket No.  
19 800001-EU, and reaffirmed this position in Docket No.  
20 810136-EU and Docket No. 820150-EU on the basis of the  
21 savings to be realized for the purchase of Scherer. In  
22 all three rate cases, the Commission fully reviewed the  
23 economics of the Scherer purchase. The plans to  
24 participate in Plant Scherer have thus been reviewed  
25 by, concurred in, and even praised by the Florida

1 Public Service Commission many times in past dockets.

2 Since Gulf acquired this capacity for the  
3 long-term lowest cost for the territorial customer, but  
4 it was not immediatley needed by the Company's  
5 territorial customer, the Commission encouraged the  
6 Company to sell as much of this capacity as possible.  
7 The Company made every effort to do so. The customers  
8 will receive substantial long-term benefits from this  
9 capacity. Thus, the customers should properly pay for  
10 Plant Scherer capacity costs that have been incurred to  
11 serve their load.

12

13 Q. On page 25 of his testimony, Mr. Rosen concludes that  
14 because Scherer capacity is more costly than other  
15 capacity in the Southern pool in 1990, there is no  
16 justification for having this capacity. Is he correct?

17 A. No. Mr. Rosen is making a hypothetical assumption,  
18 which doesn't exist in the real world, that Gulf can  
19 pick and choose the times when it needs to buy from the  
20 pool. Acquiring capacity is a "package deal." You  
21 might have some parts of the package that are, by  
22 themselves and separate from the others, uneconomical.  
23 But taking the whole package, it's clearly economical.  
24 Scherer is just such a "package deal." The capacity  
25 was acquired for the long term benefit of Gulf's

1 customers, as a whole package. Once acquired, the  
2 entire package is there for the duration of the  
3 contract. Gulf can not choose to simply do away with  
4 the capacity in one year and buy from the pool. All of  
5 this capacity exists and it must be paid for every  
6 year.

7 The territorial customers, for whom Scherer was  
8 purchased, receive the long-term benefit of Gulf's  
9 ability to serve both present and future needs for  
10 electricity at low cost, and it is proper that these  
11 customers be asked to pay for the Scherer capacity  
12 which gives Gulf that ability.

13 The pooling arrangement under the Intercompany  
14 Interchange Contract (IIC) states that all parties will  
15 add capacity to meet their customers' demand for  
16 electricity. In some years, companies will obviously  
17 have to acquire capacity which is higher cost than the  
18 average of all the units in the pool. To follow Mr.  
19 Rosen's philosophy of disallowing any new capacity  
20 which is more expensive than the pool average would  
21 eventually disallow any new capacity in rate base! His  
22 proposal is so seriously flawed, it is preposterous.

23  
24  
25

1 Q. Mr. Rosen's recommendations seem to be based on a short  
2 run analysis of the need for Plant Scherer. Should  
3 this Commission make decisions strictly on short term  
4 considerations?

5 A. Clearly, no. Mr. Rosen's testimony is based on a short  
6 run analysis, but this is not proper. This is one of  
7 the biggest concerns I have with Mr. Rosen's testimony.  
8 He has clearly held himself out as an expert at  
9 assessing the prudence of utility generation expansion  
10 plans. Gulf is frankly disturbed that none of his  
11 testimony reviewed the prudence of Gulf's plans in the  
12 time frame when it committed to the purchase of Scherer  
13 capacity, nor did any of his testimony look at the long  
14 term benefits or costs.

15 Instead, Mr. Rosen has focused solely on the test  
16 year, clearly revealing the narrow, short term nature  
17 of his review. On p. 25 of his testimony, he admits  
18 that the only basis for his recommendation to disallow  
19 Scherer is that pool capacity is cheaper in 1990. If  
20 we followed Mr. Rosen's logic and only planned one year  
21 at a time, it would spell certain disaster for the  
22 customer.

23 Mr. Rosen's testimony would have the Commission  
24 believe that a utility is able to exactly match its  
25 generating capacity need with its load each and every

1 year. That would be true if generating capacity could  
2 be purchased and installed, and refunded occasionally,  
3 in very small increments as needed. The cost of a  
4 guaranteed availability of buying capacity in this  
5 manner, however, would be so prohibitive that no one  
6 could afford to use electricity for very long.

7 The realities of operating a modern power system  
8 are that utilities must build generation in economical  
9 sizes, not in 1 mw blocks. The Scherer capacity isn't  
10 available in 1 mw blocks, and even if it were, we  
11 couldn't go to the supplier and get a full refund on  
12 megawatts we decided we didn't want for 1990 or any  
13 other year.

14

15 Q. Mr. Rosen alleges that the 63 mw of Gulf's Scherer  
16 capacity is excess. What is Gulf's response?

17 A. I have previously discussed that it is not practical to  
18 isolate pieces of generating units. Both Gulf and this  
19 Commission determined that our participation in  
20 Scherer, as well as the unit power sale concept, was in  
21 the long term best interests of our customers, and that  
22 they would save hundreds of millions of dollars. We  
23 could either participate in Scherer or not. The fact  
24 that there was a long-term benefit to our customers led  
25 us to do it. The capacity is serving the customer and



1 the customer is the rightful party to support the  
2 investment. Never in any of Gulf's deliberations did  
3 the Company ever intend to go out and secure Scherer  
4 capacity with the thought of selling it as a generation  
5 resource for the benefit of stockholders.

6 Gulf's use of the stockholders' investment to  
7 purchase the Scherer capacity was solely for the  
8 purpose of enabling the Company to meet its statutory  
9 obligation of service to and for the long-term benefit  
10 of our territorial customers. The sale of UPS capacity  
11 to Gulf States Utilities likewise was made with the  
12 best interests of our territorial customers in mind.  
13 The GSU sale enabled Gulf Power to preserve and enhance  
14 the long-term benefits of the Scherer purchase for its  
15 territorial customers while at the same time meet its  
16 obligation to the stockholders whose funds were  
17 invested.

18 The fact that Gulf States defaulted is in no way  
19 related to Mr. Rosen's concept of a business risk  
20 incurred by the stockholders. We were simply selling  
21 as much capacity as we could to maximize the long-term  
22 benefits to our customers. Just because Gulf States  
23 has defaulted does not in any way change the fact that  
24 now, as well as the time frame in which we made the  
25 decision, Scherer provides long-term benefits to our

1 customers. I will later discuss the technical errors  
2 in Mr. Rosen's testimony which apparently caused him to  
3 believe the 63 mw was surplus to Gulf's needs.

4

5 Q. Mr. Rosen is clearly attempting to show excess reserves  
6 in 1990 and thereby imply imprudence. Is there any  
7 validity to his claim?

8 A. None at all. I have previously discussed Mr. Rosen's  
9 exclusive preoccupation with the short-term, and how  
10 this is totally incorrect and will ultimately spell  
11 disaster for the customer both in reliability and cost.  
12 He has also erred regarding the prudence issue by  
13 failing to look at how Gulf got to where it is. The  
14 test of prudence regarding reserves is never what a  
15 utility's reserves are in any particular year, but how  
16 prudent the decisions were in the time frame they were  
17 made which brought the utility to that point.

18 It is interesting to note that in Gulf's  
19 particular case, 1990 conditions are significantly  
20 different than earlier expected. For example, during  
21 our 1984 rate case before the Commission, Gulf's  
22 reserves for 1990 were expected to be 18.4%, including  
23 a 42 mw sale to Gulf States. But Gulf's load at that  
24 time was only estimated to be 1600 mw. We now project  
25 our load for 1990 to be 1750 mw, to which Mr. Rosen

1 basically agrees. If we were to calculate our reserves  
2 for 1990 with the 1750 mw load instead of the 1600 mw  
3 estimated, but add to our capacity we anticipated in  
4 1984 the 42 mw on which Gulf States has defaulted, our  
5 reserves in 1990 would be only 10.7%, which even Mr.  
6 Rosen would agree is not excess.

7

8 Q. Why then, are Gulf's reserves estimated to be 25.5% for  
9 1990?

10 A. This is due to two reasons. One, we have 55 mw of  
11 additional capacity which we have been able to squeeze  
12 out of our existing units. We have been encouraged by  
13 our Commission to do that, so we should certainly  
14 presume that that was a prudent action. The other  
15 component is 175 mw of additional capacity which we now  
16 will have as a result of extending the retirement dates  
17 of our five oldest generating units, three of which  
18 burn expensive oil.

19 Because this extension of the retirement dates of  
20 these units also results in significant savings to our  
21 customers, it certainly is a prudent action. Mr. Rosen  
22 neglected to review these factors in hastily attempting  
23 to show excess reserves which he could attribute to  
24 Scherer for 1990.

25

1           In order to more easily understand the difference  
2           between what we expected in 1984 and what we now see, I  
3           have attached as Schedule 1 a comparison of the  
4           capacity forecast and the load forecast plus 20%  
5           reserves which we estimated in 1984. As I stated  
6           before, our reserves were then estimated to be 18.4% in  
7           1990. But, conditions are different now as compared to  
8           what we estimated in 1984.

9           I have also attached Schedule 2, which compares  
10          our 1984 capacity forecast with the actual loads we  
11          have experienced from 1984 through 1989 and our current  
12          forecast. As in Schedule 1, the load has been  
13          increased by 20% to reflect reserve requirements.  
14          Schedule 2 indicates how much higher actual loads have  
15          been than what we anticipated in 1984, and demonstrates  
16          that the capacity forecast which we had in 1984 would  
17          have been quite inadequate for the loads we actually  
18          experienced.

19          My Schedule 3 compares the 1984 load projection  
20          with actual loads and the current forecast. This shows  
21          just how much additional capacity is needed compared to  
22          what we estimated in 1984.

23          Fortunately for Gulf, we have been able to gain  
24          additional capacity significantly above that estimated  
25          in 1984 without the construction of any new generating

1 units. By 1990, this has totalled approximately  
2 230 mw, 55 mw from squeezing more capacity out of  
3 existing units, and 175 mw from extending the  
4 retirement dates of five older units, including three  
5 that burn expensive oil.

6 This significant capacity addition to our system  
7 is demonstrated on Schedule 4. This schedule is  
8 important for two reasons. First, it shows why our  
9 reserves for 1990 are higher than we anticipated in  
10 1984, even with a substantial load above what we  
11 expected. Second, it allowed us to enter the 1990's  
12 with significantly more capacity than we expected, and  
13 be in a better position to make the new unit power  
14 sales which I will discuss later in my testimony.

15 Incorporating this increased capacity which we have  
16 been able to secure without any new generating units,  
17 in conjunction with the much higher loads which we have  
18 experienced, Schedule 5 demonstrates our current  
19 capacity and load condition.

20 I have also included Schedule 6, which shows all  
21 four of the curves I have previously discussed on  
22 Schedules 1 through 5 for overall reference. If Mr.  
23 Rosen had attempted to understand this and had focused  
24 his attention on these relevant facts rather than his  
25 diversionary smokescreen issues, he would not be making

1 any such allegation that Gulf has excess reserves for  
2 1990, and he would certainly not be suggesting that the  
3 Scherer capacity be disallowed in rate base.

4  
5 Q. How have these conditions which have changed  
6 significantly from what you estimated in 1984 affected  
7 Gulf's decision to enter into the new Unit Power Sales?

8 A. They have had a major effect on that decision. Had we  
9 not taken the steps to increase our capacity by this  
10 230 mw, then Gulf would be short of capacity entering  
11 the 1990's and in an extremely deficit position. The  
12 decision to make the additional sale of the Scherer  
13 capacity between 1993 and 2010 would have been much  
14 more difficult, and it is doubtful that Gulf would have  
15 entered in the sale. The fact that we had this  
16 additional capacity, however, allowed us to make the  
17 sale and realize the tremendous monetary benefits to  
18 our territorial customers which I will cover later.  
19 Thus, it is extremely inappropriate for Mr. Rosen to  
20 allege that these capacity changes, which have resulted  
21 in millions of dollars of savings for our customers in  
22 the long-term, constitute a capacity excess in 1990 for  
23 which Gulf should be penalized.

24

25

1 Q. Mr. Rosen even suggests that the new UPS contracts  
2 which Gulf Power signed were imprudent. Also, Staff  
3 has suggested as the basis for its recommendation to  
4 disallow Scherer in the rate base the fact that the  
5 capacity is all sold starting in 1995. Are these valid  
6 positions?

7 A. No. I have already demonstrated that the Scherer  
8 capacity is clearly a long-term benefit to our  
9 customers. I have also included with my testimony  
10 Schedule 3, which shows a comparison of Scherer  
11 participation with and without the new unit power  
12 sales. Because the off-system customer is bearing the  
13 costs of the capacity during the early years when  
14 carrying costs are higher than in the later years, the  
15 capacity is a significant bargain to Gulf's customers  
16 when it returns.

17 Mr. Rosen has made a number of misleading comments  
18 about the new unit power sales and their relationship  
19 to Scherer prudence, but this schedule clearly shows  
20 that Gulf acted prudently in making the additional  
21 sales, and thereby ensuring additional future benefits  
22 to its customers.

23

24

25

1 Q. What are the reasons for the savings associated with  
2 the new unit power sales?

3 A. The primary savings result from the fact that  
4 off-system customers are supporting the investment in  
5 the Scherer capacity, which is a significantly higher  
6 cost in the early years of its useful life compared to  
7 the cost of combustion turbines, which, as we all know,  
8 cost significantly less than base load coal capacity.  
9 There are other reasons for the savings, but that is  
10 the primary difference.

11

12 Q. How would you characterize this analysis indicated on  
13 this schedule?

14 A. This is certainly not intended to be an exact,  
15 exhaustive analysis. It is intended to be a simplistic  
16 analysis which still does, however, accurately capture  
17 the difference in the two scenarios. The difference in  
18 the two scenarios is what is important, since this  
19 represents the incremental effect on Gulf's customers.

20

21 Q. What assumptions were made in performing this analysis?

22 A. Because Gulf already owns the Scherer capacity, it is a  
23 part of our resources. Absent the new unit power  
24 sales, this resource would be fully available for  
25 territorial customers starting June 1, 1995. With or



1 without the new unit power sales, this capacity will be  
2 a territorial resource from June 1, 2010 forward.

3 Thus, regardless of what happens to other existing  
4 generating units on Gulf's system, Gulf will have this  
5 capacity beyond 2010.

6 In our current plan, we are fully selling the  
7 capacity starting in 1995, and our present budget calls  
8 for the addition of a 126 mw CT in 1995 and another  
9 similar unit in 1998. If we did not make the new unit  
10 power sales, the 212 mw of Scherer capacity would be  
11 available for territorial load, and no additional  
12 capacity would be needed through year 2000. From 2000  
13 to 2010, capacity additions would be common to both  
14 plans, and are omitted for simplicity. Since we are  
15 only interested in the difference in the two scenarios,  
16 and these costs are the same in both scenarios, their  
17 omission will have no effect on the difference in cost  
18 of the two scenarios.

19 In the year 2010, the Scherer capacity returns to  
20 territorial service in the scenario with the new unit  
21 power sales, and this capacity addition will be  
22 utilized by territorial customers. In the scenario in  
23 which no unit power sales were made, the capacity was  
24 available to territorial customers during the previous  
25 fifteen years, and two 126 mw CT's are required in

1       2010. At this point in time, both plans have 212 mw of  
2       Scherer capacity and two 126 mw CT's which have been  
3       added. Since both plans now have exactly the same  
4       capacity, future capacity additions will be the same  
5       and there will be no further differences in the plans.  
6

7   Q.   Would either plan be affected by changing retirement  
8       dates, particularly Daniel 1, which is currently  
9       projected to retire in 2012?

10  A.   No. In 2010, both plans have exactly the same amount  
11       of base load capacity. Thus, any change in the  
12       extension in retirement dates of base load capacity  
13       would have the same effect on both plans, would be  
14       common to both of them, and would thus introduce no  
15       difference between the plans. Since we are only  
16       looking at differences between the plans to establish  
17       the benefit of the new unit power sales, integrity in  
18       the difference is maintained regardless of what happens  
19       to changes in retirement dates of base load units.  
20

21  Q.   What amount of generating capacity from Plant Scherer  
22       was committed to Gulf States Utilities (GSU) for UPS in  
23       1990?

24  A.   A total of 44 mw. Mr. Johnson is incorrect in his  
25       assumption that if Gulf States had not defaulted on its

1       UPS contract, 63 mw would not have become the  
2       responsibility of Gulf's retail customers. The  
3       remaining 19 mw, as Mr. Scarbrough discussed with the  
4       Commission in his 1984 rate case testimony, was planned  
5       to be in territorial service and be the responsibility  
6       of the Company's retail customers through base rates.

7

8   Q.   One issue raised in this proceeding is whether an  
9       adequate attempt has been made to market the unit power  
10      sales capacity available because of the default of Gulf  
11      States Utilities (GSU). Does Gulf have additional UPS  
12      capacity which it would be willing to sell should a  
13      buyer be found?

14  A.   Yes. Gulf has 63 mw of Scherer capacity which it would  
15      be willing to sell as UPS during 1990 in order to  
16      further enhance the long-term benefits of this Scherer  
17      capacity to Gulf's territorial customers. If Scherer  
18      were sold, Gulf could purchase pool capacity at a lower  
19      price than Scherer.

20

21  Q.   Is this capacity considered excess capacity on the Gulf  
22      system?

23  A.   This capacity is not "excess". The word excess implies  
24      capacity that is greater than a utility's needs.

25      Since the Scherer capacity is required to meet our

1 customers' long range needs, and has been found by this  
2 Commission to be beneficial to the customers in the  
3 long run, it certainly cannot be considered excess. In  
4 the short run, if an alternative means of supporting  
5 this investment could be found, Gulf would obtain for  
6 its territorial customers the additional advantages  
7 related to such an alternative. Nevertheless, this  
8 capacity is being used by our retail customers today.

9

10 Q. What short term alternative are you speaking of?

11 A. Selling the 63 mw off-system through a UPS type  
12 arrangement. Unfortunately, there simply is no market  
13 for additional unit power sales in 1990 at this time  
14 due to the current economic situation. While we have  
15 been able to sell additional unit power during the mid  
16 1990's and beyond, there simply is no market for 1990.  
17 It appears that this is the case through 1992.  
18 However, we continue to pursue every such possibility.

19

20 Q. What efforts has Gulf made recently to attempt to  
21 market this capacity in the 1990 - 1992 timeframe?

22 A. Through Southern Company Services (SCS), Gulf and the  
23 Southern system have contacted every utility that is  
24 either interconnected with or within a reasonable  
25 transmission distance of Southern regarding the

1 possibility of their purchasing this unit power  
2 capacity. No one has expressed any interest.

3 Q. Does the Florida Public Service Commission Staff  
4 (Staff) agree that Gulf has diligently attempted to  
5 market the Scherer capacity?

6 A. It is my understanding that they do. In 1989, Staff  
7 extensively reviewed the market situation with bulk  
8 power marketing personnel at SCS, who related that  
9 there currently is not a market for additional UPS  
10 capacity. Staff has indicated they have seen no  
11 evidence to the contrary, and further that an adequate  
12 attempt has been made to market the UPS capacity which  
13 became available because of Gulf States Utilities'  
14 default.

15

16 Q. Has Gulf "pulled out all the stops" to sell all the  
17 power it could off-system for 1990?

18 A. Yes. Gulf has "pulled out all the stops." It has made  
19 every reasonable effort to sell additional power, but  
20 the market simply does not exist.

21

22 Q. Mr. Rosen's argument is that Gulf should utilize  
23 reserve margins which would have occurred had Gulf  
24 States not defaulted on its contract. Are his  
25 calculations correct?

- 1 A. No, his calculations are wrong. This is one of the  
2 major errors in Mr. Rosen's testimony. He has misled  
3 himself, and is attempting to mislead the Commission.  
4 For some reason, he has assumed that our contract with  
5 Gulf States called for 150 mw of sales in 1990. In  
6 fact, the contract only called for 42 mw of sales  
7 during the test year. I have attached as Schedule 8 of  
8 my exhibit, a copy of the Gulf States allocations as of  
9 December, 1983. These allocations were utilized in the  
10 expansion plan provided as part of our last rate case,  
11 Docket No. 840086-EI. It quite clearly shows that Gulf  
12 was only planning to sell Gulf States 42 mw during the  
13 peak of 1990. The entire basis for Mr. Rosen's  
14 allegation that Gulf should utilize a 15 percent  
15 planning reserve margin is based on his statement that  
16 we felt this level, with the Gulf States sales, would  
17 be adequate in 1990. Mr. Rosen's misunderstanding of  
18 the facts caused him to reach an erroneous conclusion.  
19
- 20 Q. It is well known that Gulf will sell all of its Scherer  
21 capacity from 1995 through 2010. Is Scherer 3 still in  
22 the long-term best interests of the rate payers?
- 23 A. Definitely. There will still be twenty years of life  
24 left in Scherer when it again will be committed for our  
25 customers' use in 2010. At that time, its cost will be

1 a small fraction of what equivalent new coal capacity  
2 will cost. During that time frame, Gulf and the  
3 Southern system will need to add new coal resources as  
4 part of our generation mix; not only will the Scherer  
5 capacity be a tremendous benefit during that period,  
6 but it also allows Gulf to avoid the need to add  
7 capacity between now and the mid 1990's.

8  
9 Q. You have covered the significant errors Mr. Rosen made  
10 which led to false conclusions. Are there conceptual  
11 problems in his testimony as well?

12 A. Yes. It is troubling enough that his analysis was  
13 mathematically flawed, but even more troubling is his  
14 conceptual philosophy. He candidly admits on p. 25 of  
15 his testimony that the only basis for his proposed  
16 disallowance of Scherer was that Scherer was more  
17 expensive than pool capacity during a single year,  
18 1990. To make such a drastic recommendation based on  
19 one year, and ignore the long-term benefits which this  
20 Commission has recognized are associated with the  
21 Scherer capacity, is a dangerous philosophy to adopt, as  
22 such action will drastically increase customer costs in  
23 the long-term.

24 Perhaps the biggest conceptual flaw is Mr. Rosen's  
25 proposal that investments which were prudently incurred

1 at the time the decision was made should be disallowed  
2 simply because conditions change in the future. I have  
3 discussed in my testimony the conditions which led Gulf  
4 Power to participate in the Scherer capacity. These  
5 matters were fully reviewed with the Commission on  
6 several occasions, and the Commission has consistently  
7 agreed with us that participation in Scherer was  
8 appropriate and prudent because of the long-term  
9 savings to our customers.

10 The Commission has aggressively encouraged us to  
11 make off-system sales of this capacity, until needed by  
12 territorial customers, to the maximum extent possible.  
13 We have certainly done that. We have exhausted the  
14 marketplace. We have "pulled out all the stops." We  
15 have made all of these efforts in order to minimize the  
16 cost of electricity to our territorial customers over  
17 the long term. It would be patently unfair for Gulf to  
18 now be penalized by excluding from rate base some  
19 capacity that was a part of a sale due to the  
20 unforeseeable default on the purchasing party.  
21 This is especially true since the Scherer capacity,  
22 even without GSU, is still a clear long term benefit to  
23 the customer. As stated previously, this capacity is  
24 being used by our customers at this time.  
25



1           The standard of utility prudence has consistently  
2           been that if the decisions made were prudent, based on  
3           the information available at the time, then investments  
4           resulting from these decisions are properly the  
5           responsibility of the customer. The fact that Scherer  
6           remains a long-term benefit to our territorial  
7           customers exacerbates the implications of Mr. Rosen's  
8           proposals.

9           It is important to stop at this point and  
10          understand Gulf's situation in early 1984: (1) It had  
11          already purchased the Daniel capacity for the long-  
12          term best interests of its customers. (2) It had  
13          already purchased the Scherer capacity, again to secure  
14          long term-benefits for its customers. (3) It had  
15          already executed contracts for the unit power sales.

16          Since that time, Gulf has made no additional  
17          commitments to secure new generating capacity. Those  
18          decisions that were cemented in 1984 were considered  
19          prudent by Gulf, were considered prudent by the  
20          Commission, and ensured long-term benefits to Gulf's  
21          territorial customers as a result of the Daniel  
22          capacity, the Scherer capacity, and Gulf's  
23          participation in the unit power sales with this  
24          capacity.

1           Where was Mr. Rosen in the early 1980's when  
2 these decisions were being made? What is it he is  
3 suggesting that we do differently now than that which  
4 we have proposed? Other than the punitive action of  
5 disallowing stockholders a return on their investment  
6 which was risked so that the customer could get lower  
7 costs, Mr. Rosen has no recommendations for changes  
8 that Gulf should have implemented now or in the past.  
9 Gulf has demonstrated that Mr. Rosen's recommendations  
10 due to his erroneous calculations are ill-founded and  
11 without merit. We ask that the Commission honor the  
12 regulatory compact which has been built with Gulf and  
13 allow the Scherer capacity in the rate base.

14  
15 Q. Was Plant Scherer Unit 3 capacity, as Witnesses Johnson  
16 and Schultz state, obtained by Gulf for the purpose of  
17 making unit power sales (UPS)?

18 A. No. Mr. Johnson and Mr. Schultz are mistaken when they  
19 say that Scherer was planned for UPS. Gulf's purchase  
20 of Plant Scherer capacity was initiated and completed  
21 for the specific purpose of meeting the long-term  
22 electrical needs of the Company's territorial  
23 customers. During the mid-1980's time frame in which  
24 Gulf was able to acquire this capacity, it was not  
25 immediately needed to meet existing territorial

1 customer load and we made off-system sales, but off-  
2 system sales never dictated the need or goal of the  
3 acquisition.  
4

5 Q. How did unit power sales enter the picture?

6 A. Oil price increases initiated by the Arab oil embargo  
7 of 1973 had caused significant decreases in the load  
8 forecast, higher prices for oil as a boiler fuel, and a  
9 significant advantage for coal fired power as compared  
10 to that generated by oil. In 1979, the Organization of  
11 Petroleum Exporting Countries (OPEC) initiated a second  
12 sharp rise in the price of oil, triggering a number of  
13 changes worldwide, particularly in the United States.  
14 The economy slowed down, load forecasts again dropped  
15 significantly, and the price of oil-generated  
16 electricity shot upward. Because of this tremendous  
17 drop in the load forecast, Southern determined that it  
18 had more base load capacity under construction than it  
19 would need, and it faced a decision regarding this  
20 capacity.  
21

22 Q. What decision did Southern face?

23 A. With these large amounts of capacity committed and  
24 under construction, Southern had two choices. The  
25 first choice would be to simply defer and/or cancel the

1 generating units at significant cost to Southern's  
2 customers and stockholders. The second choice, which  
3 appeared feasible, was to go ahead and complete the  
4 generating units before they would be needed for  
5 territorial load, sell the capacity to oil burning  
6 utilities off the Southern system for a finite period  
7 of time, and then recall the capacity as it was  
8 projected to be needed for territorial customer load.

9 We began in 1980 to determine the market condition  
10 to see if such a plan could be implemented. Because of  
11 the extremely high price of oil and the forecast of  
12 even sharper rises in the future, we found willing  
13 listeners in Florida and Texas where utilities were  
14 major consumers of oil. We were able to negotiate  
15 arrangements with these utilities whereby they  
16 purchased the capacity from the generating units over a  
17 scheduled period, and the capacity was then scheduled  
18 to be returned to the Southern system operating  
19 companies when it was needed for use by our territorial  
20 customers.

21 This gave our territorial customers the best of  
22 all possible worlds. Not only did they not have to  
23 bear any cancellation or deferral costs associated with  
24 these units, but they were also assured of additional  
25 base load coal generating capacity, which was being

1 encouraged by this Commission, which they were able to  
2 secure at low committed prices of the 1970's, and the  
3 capacity would come back to the companies even further  
4 depreciated when it returned to territorial use in the  
5 1980's and early 1990's.

6 Thus, the Unit Power Sales (UPS) concept was born.  
7 The UPS concept has been successfully implemented by  
8 the Southern system, saving our customers many hundreds  
9 of millions of dollars.

10

11 Q. Were the Unit Power Sales reviewed by this Commission?

12 A. Yes. The Commission has reviewed the unit power sale  
13 concept in depth. In fact, the Commission stated in  
14 Gulf's 1982 rate case, Docket No. 820150-EU, Order No.  
15 11498, that it had reviewed these sales from all angles  
16 and concluded that Gulf's participation in such unit  
17 power sales caused our customers to "benefit  
18 handsomely".

19

20 Q. On pages 17 through 21 of his testimony, Mr. Rosen  
21 discusses the unit power sales and states that these  
22 were attempts to alleviate excess capacity on Gulf's  
23 system. Is he correct?

24 A. No. We find it noteworthy that our own Commission,  
25 over many years of review and oversight, has found

1 these sales in the long-term best interests of our  
2 customers, who "benefit handsomely", and yet Mr. Rosen,  
3 who has reviewed the situation for only a short period  
4 of time, comes to a completely different conclusion.

5 Mr. Rosen's repeated references to the  
6 stockholder's business risk is nothing more than a  
7 smokescreen. The Scherer capacity was clearly acquired  
8 for our territorial customers' long term needs. Gulf  
9 is not in the business of acquiring capacity to  
10 permanently sell off-system. We are a public utility  
11 in Florida, statutorially obligated to meet the needs  
12 of our territorial customers. We have used our  
13 stockholders' funds to meet this obligation. The costs  
14 for the prudently acquired Scherer capacity are clearly  
15 the territorial customers' responsibility. Mr. Rosen's  
16 characterization of UPS contracts as attempts to "get  
17 rid of" this "excess" coal capacity is mere  
18 sensationalism.

19

20 Q. If the Commission does not authorize this Scherer  
21 capacity in rate base, what will Gulf do?

22 A. I cannot answer that exactly at this point. We  
23 certainly will have to review what our options are. If  
24 the Commission reverses its earlier decisions and  
25 disallows the inclusion of 63 mw in the rate base,

1           thereby determining that the Company's participation in  
2           Scherer is not in the long term best interest of our  
3           territorial customers, even though these same customers  
4           are using and benefiting from this capacity, one of our  
5           obvious options must be to secure a permanent buyer for  
6           the Scherer capacity, bricks and mortar, lock, stock,  
7           and barrel.

8  
9   Q.   I thought you said earlier that there is no market for  
10       additional unit power sales in this time frame.

11  A.   I certainly did, and it is true that there is currently  
12       no buyer for unit power capacity in 1990, 1991, or  
13       1992.  But if Gulf were to make a permanent sale of the  
14       Scherer capacity, that is, for the life of the plant, I  
15       believe that the economic benefits to be gained at the  
16       end of the new unit power sales contract will cause  
17       many utilities to be very interested in purchasing the  
18       capacity from us.  If we can find a suitable buyer,  
19       that will have to be our first option in order to  
20       relieve our stockholders from the significant burden  
21       that results from having to carry this capacity with no  
22       return on their investment.

23                As a long time participant in the planning and  
24       operation of our system, I would really hate to see  
25       that happen.  Gulf and the Southern system have worked

1 long and tirelessly in responding in a commendable way  
2 to the tremendous upheaval that has burdened the  
3 industry in the last fifteen years. We have worked  
4 well with this Commission, demonstrating to it the  
5 benefit of the Scherer capacity for our territorial  
6 customers. It is not in the best interests of our  
7 territorial customers to lose the obvious benefits of  
8 Gulf's participation in the Scherer capacity. We ask  
9 the Staff to reconsider its position taken on this  
10 issue. We ask the Commission to reaffirm earlier  
11 decisions recognizing the prudence of Gulf's decision  
12 and allow Scherer in the rate base in this case.

13

14 Q. Mr. Rosen discusses on pages 21 and 22 of his testimony  
15 the concept of Gulf's business risk in making UPS  
16 sales. Is he correct?

17 A. No. Mr. Rosen has completely misapplied the concept of  
18 business risk. The concept of business risk is that  
19 the party who stands to benefit from an investment  
20 should bear the risk of the investment. Gulf's  
21 stockholders have never taken a risk of building  
22 capacity in order to be able to make sales with the  
23 thought of earning a higher than reasonable return on  
24 their investment. Mr. Rosen's allegations about excess  
25 stockholder profits from UPS are a farce. The Federal



1 Energy Regulatory Commission (FERC) regulates the  
2 allowed rate of return from these, as well as all  
3 other, bulk power transactions. All the capacity which  
4 Gulf has secured at Scherer has been for the benefit of  
5 the customer. Since the customer is the beneficiary,  
6 it is only reasonable that the customer should bear  
7 these prudently incurred costs associated with the  
8 investments that bring about that benefit.

9  
10 Q. Mr. Rosen discusses, on page 23, how Southern's  
11 stockholders have greatly benefited from UPS since  
12 1983, by having made greater profits than if new  
13 baseload coal units sold in UPS had never been built.  
14 Is this true?

15 A. This is absolutely incorrect. Gulf and the Southern  
16 system do not construct capacity for stockholders.  
17 Stockholders do not use electricity; they do not  
18 influence the amount of load the company is obligated  
19 to serve. Customers use electricity; they create the  
20 demand for electricity, and the company must plan to  
21 serve that load. Because the company must construct or  
22 otherwise obtain generating capacity for the customer,  
23 it is the customer's proper responsibility to pay for  
24 that capacity.

25

1           The UPS since 1983 have not increased Gulf's  
2 stockholder profits. As a matter of fact, the  
3 stockholder has fared terribly. This is true simply  
4 because the Gulf States UPS default has forced  
5 stockholders to absorb the expenses associated with  
6 capacity planned and purchased for the long-term  
7 benefits of Gulf's territorial customers.  
8

9 Q. Mr. Rosen draws the same conclusion regarding  
10 stockholders about the new UPS which run from 1993  
11 through 2010. Would you like to comment on this?

12 A. The system made these sales for the territorial  
13 customers' benefit. No stockholder-related analyses  
14 were conducted in preparing to make these sales.  
15 Instead, we looked at the revenue requirements  
16 associated with the investment in the capacity for  
17 which the territorial customer was responsible, and saw  
18 that the territorial customers would benefit from these  
19 sales. That was the sole criterion on which the  
20 Company based its decision to make the new UPS. This  
21 was carefully reviewed with Mr. Rosen during my  
22 deposition, but he chose to ignore it.  
23  
24  
25

1 Q. Has this Commission ever in the past expressed any  
2 concern regarding the prudence of Daniel, Scherer, or  
3 the unit power sales?

4 A. The Commission has never expressed any concern about  
5 the prudence of our generation expansion plans related  
6 to purchasing Daniel or Scherer. The Commission's only  
7 concern was during the early 1980's as to whether or  
8 not Gulf started quickly enough making off-system  
9 sales. Although Gulf's witnesses testified that there  
10 has to be a willing buyer to consummate a UPS sale, the  
11 Commission's position was that Gulf's efforts at making  
12 off-system sales were not aggressive and timely enough.  
13 The Commission has never expressed any concern with our  
14 management of this area. During the early 1980's, it  
15 even penalized Gulf for not starting off-system sales  
16 efforts early enough!

17

18 Q. How long has Gulf been trying to market the capacity in  
19 Scherer?

20 A. Since 1980, Gulf and Southern have attempted to market  
21 unit power sales off-system to the maximum extent  
22 possible. During the last ten years, we have had a  
23 non-stop aggressive program of maximizing these sales.

24

25

1 Q. Then could there be any validity to any claim that Gulf  
2 and Southern have not started early enough in  
3 attempting to market the 63 MW of Scherer?

4 A. Absolutely not. Even though only 19 MW was available  
5 for sale during part of this period, efforts at selling  
6 other capacity during this time frame clearly prove  
7 that no additional sales of Scherer could have been  
8 made, even if it had been available.

9

10 Q. When it was obvious that Gulf States was defaulting on  
11 the contract, did Gulf attempt to market the Scherer  
12 capacity which would be freed up?

13 A. We were already making a maximum effort to make  
14 additional unit power sales that would increase long  
15 term benefits to our customers. Gulf specifically  
16 instructed Southern Company Services to make every  
17 effort to sell the capacity on which Gulf States  
18 defaulted.

19

20 Q. Were any of these efforts successful?

21 A. No. There simply has not been any market for  
22 additional unit power sales during the 1985-1990 time  
23 frame since we made the sales to Gulf States.

24

25

1 Q. Then Gulf really has "pulled out all the stops" to  
2 minimize territorial customer revenue requirements by  
3 maximizing off-system sales?

4 A. Yes. We have truly "pulled out all the stops". No  
5 effort earlier in time or more aggressive would have  
6 made any difference in securing additional unit power  
7 sales during the 1985-1990 time frame.

8

9 Q. Has this Commission previously reviewed the prudence of  
10 Gulf's participation in Daniel and the relationship to  
11 unit power sales?

12 A. Yes. In Order No. 10557 of Docket No. 810136-EU,  
13 issued February 1, 1982, the Commission stated that  
14 Gulf's expansion decisions, including our decision to  
15 participate in Plant Daniel, were in the long-term best  
16 interests of our customers. The Commission later  
17 specified in Order No. 11498 of Docket No. 820150-EU,  
18 issued January 11, 1983, that it had reviewed the unit  
19 power sales contracts from all angles and concluded  
20 that our retail customers benefited handsomely from the  
21 contracts. In 1983, the Commission, as well as Gulf,  
22 had had adequate time to assess the then-expected  
23 impact of the 1973 Arab oil embargo and the 1979 rise  
24 in oil prices. Based on Gulf's and the Commission's  
25 best knowledge at the time, our participation in both

1 Daniel and Scherer was deemed prudent. It was  
2 recognized that our customers would receive significant  
3 benefits over the long term as a result of the unit  
4 power sales contracts.

5

6 Q. Do generation expansion studies which were conducted in  
7 the 1980's for the Gulf system indicate a level of  
8 baseload capacity which is greater than an optimal  
9 amount?

10 A. No. All decisions have been driven by minimizing the  
11 cost to Gulf's customers. In the 1970's, when load  
12 forecasts were dramatically impacted by the energy  
13 crisis, Southern had a number of baseload generating  
14 units committed for construction and a choice had to be  
15 made. The system could cancel construction of these  
16 units, thereby moving the generation mix away from base  
17 load, but at a cost to the system of hundreds of  
18 millions of dollars. Alternatively, the system could  
19 finish the units and sell the related capacity to  
20 utilities off system that were dependent on oil for a  
21 finite period of time. This would result in neither  
22 cancellation costs nor associated capital costs related  
23 to these units which would have to be borne by the  
24 territorial customer. When the units would be needed  
25 by the system, they would be highly depreciated and be

1 available at a much lower cost than would other  
2 baseload capacity.

3 The system chose to complete the units and sell the  
4 capacity to other oil burning utilities in Florida and  
5 other areas as unit power sales (UPS). As I stated  
6 earlier, the Commission reviewed Gulf's plans to  
7 participate in the ownership of Plant Daniel and Plant  
8 Scherer and encouraged Gulf to participate in Unit  
9 Power Sales to Florida utilities. Through the Southern  
10 system, Gulf sold Daniel and Scherer capacity  
11 off-system to the maximum extent possible.

12

13 Q. Is it proper for Mr. Rosen to state that Gulf and  
14 Southern did not review their expansion plans, and that  
15 a less than optimal mix of baseload capacity existed on  
16 the system during the 1980's?

17 A. No. The successful completion of those units of  
18 Southern's under construction which had been committed  
19 to in the 1970's and 1980's, accompanied by the UPS  
20 undertaking, required constant review. All planning  
21 studies conducted during the 1980's operated under the  
22 inherent assumption that these units would be finished.  
23 Quite naturally, the studies would show, as Mr. Rosen  
24 points out in his testimony, that peaking capacity  
25 should be added after this baseload capacity was

1 completed. It is unknown what the studies would have  
2 shown if the units which were under construction had  
3 been assumed to be cancelled.

4 Baseload unit construction could possibly have been  
5 indicated as the proper course of action. The key  
6 point to be made here is that the system had adequate  
7 capacity for the 1980's, and the purpose of the  
8 generation mix studies which were conducted in the  
9 1980's was to determine what capacity to add after the  
10 completion of previously committed capacity. The  
11 driving criterion during expansion plan review in the  
12 1980's was "What course of action will result in the  
13 lowest long-term cost to the territorial customer?"  
14 This was far more important to us than an artificial  
15 concern with mix proportions.

16

17 Q. Mr. Rosen alleges that during the 1980's, Southern  
18 embarked on an expansion plan of base load units,  
19 whereas the mix study showed that new generating  
20 capacity in the 1990's should be new peaking capacity.  
21 He then implies that some of the capacity planned  
22 during the 1980's should have been peaking. Is he  
23 correct?

24 A. No. The Southern system did not plan any new  
25 additional generating capacity during the 1980's. We



1 already had adequate capacity under construction coming  
2 on line which would be sold in unit power sales and  
3 then returned to our customers' use as our load grew.  
4 The fact that we were able to complete this capacity  
5 and sell it for a short period of time, rather than  
6 incurring the wasteful cost of cancellation, certainly  
7 meant that the next units beyond this capacity should  
8 be peaking units. Based on current planning studies,  
9 that is exactly what Southern intends to do.

10

11 Q. Mr. Rosen states in his testimony that the 1986  
12 Planning Hearing document filed in Docket No.  
13 860004-EU-A showed that the long term optimum mix of  
14 capacity for the Southern system should be  
15 approximately 57 percent base load, whereas capacity in  
16 1995 was expected to be 83 percent base load. He then  
17 states that these results imply that the current mix of  
18 capacity is far from the long term optimum. Is he  
19 correct?

20 A. Absolutely not. The study shows that in the year 2015,  
21 quite a long time from now, our long term optimum mix  
22 is expected to be 57 percent base. But the optimum mix  
23 for 2015 bears no relationship to the optimum mix for  
24 1995. The year 2015 is twenty years beyond 1995. This  
25 study was based, among other things, on cost estimates

1 for future units which would have cost thousands of  
2 dollars per kilowatt by year 2015, whereas existing  
3 coal units on Southern by 1995 will be depreciated to a  
4 cost far below that. Southern's mix for 1995 will  
5 certainly be reasonable based on the cost of embedded  
6 capacity on the system. Mr. Rosen, by not having  
7 participated in earlier proceedings, is perhaps  
8 unfamiliar with the Commission's recognition of our  
9 plans as appropriate for the territorial customer. We  
10 have, in addition to the many rate cases cited,  
11 continually brought our expansion plans to the  
12 Commission's attention through annual Ten Year Site  
13 Plans, Annual Planning Workshop proceedings, and  
14 Planning Hearings. The Commission has been regularly  
15 advised of our plans.

16

17 Q. Did the Commission hire its own consultant to review  
18 the filings of Gulf for the 1986 Planning Hearings?

19 A. Yes. The consultant had high marks for our study with  
20 respect to our methodology, data sources, computer  
21 tools, and results.

22

23 Q. On pages 28 through 30, Mr. Rosen discusses Gulf's  
24 reserves in 1990 and beyond. Are his observations  
25 correct?

1 A. No. He assumed that Gulf would have deemed it prudent  
2 to maintain the relatively low reserve margins which he  
3 calculated. In doing so, he has ignored the  
4 information which we discussed with him during my  
5 deposition in this docket as well as the information  
6 provided in response to various discovery and  
7 information requests from the Office of Public Counsel.  
8 We have explained that Gulf does not do its planning  
9 totally independent of the Southern system. Gulf plans  
10 its expansion both to meet its territorial needs and as  
11 part of the Southern system. As long as adequate  
12 capacity is available on the Southern system for Gulf's  
13 purchase through the IIC in any particular year, Gulf  
14 certainly does deem it prudent to maintain a relatively  
15 low reserve margin on its own system, consistent with  
16 an overall optimized expansion plan to minimize the  
17 long-term cost to its customers.

18  
19 Q. On pages 30 and 31 of his testimony, Mr. Rosen attempts  
20 to make a mathematical tie between the percent reserve  
21 and EUE criteria. Is such a tie reasonable?

22 A. Not in the method utilized by Mr. Rosen. Our forced  
23 outage rates on our generating units are well below  
24 industry averages at this time. Whether we can keep  
25 them there in the future is a question that only time

1 will tell. The EUE level calculated is low compared to  
2 our criterion, and it is probably not within the  
3 accuracy of the computer program. There has been no  
4 need to calculate it more precisely because future  
5 generation additions have been triggered by the 20  
6 percent reserve margin criterion.

7 An EUE or LOLP criterion is admittedly difficult  
8 to understand. The calculation of an appropriate level  
9 for utility systems is also admittedly quite difficult.  
10 That is why Southern has adopted a policy of dual  
11 criteria, in that a reserve margin is much easier to  
12 understand and, more importantly, more appropriate to  
13 determine capacity adequacy on the system. The  
14 simplistic ratio comparison of EUE and reserve margin  
15 levels perfunctorily performed by Mr. Rosen is totally  
16 meaningless, and simply another attempt at promoting  
17 his empty argument that Gulf has excess reserves.

18

19 Q. Mr. Rosen has me confused. One place he says Gulf has  
20 excess reserves and other place he says Gulf is  
21 planning too low a reserve margin. Can you help me  
22 out?

23 A. I will certainly try. As I have previously discussed,  
24 Mr. Rosen erroneously manipulated the numbers for the  
25 future in his attempt to show a very low reserve margin

1 for Gulf. He has failed to even mention the fact that  
2 Gulf, on a stand-alone basis separate from Southern,  
3 had negative reserves in 1988, and he has attempted to  
4 show that Gulf has excess reserves in 1990. If he were  
5 correct, that would violate every principle for  
6 examining long-term reserves, which is the only  
7 reasonable way to assess generation adequacy.  
8 Fortunately for our customers, we have shown this  
9 Commission that Mr. Rosen's calculations are not  
10 correct; thus, there is no validity at all to his  
11 conclusion. It is interesting to note that, on page 32  
12 of his testimony, Mr. Rosen concluded that 131 mw of  
13 supposed excess capacity was extremely close to the 150  
14 mw of capacity which he falsely assumed Gulf would have  
15 supplied GSU during 1990 had GSU not defaulted. We  
16 have already shown how that assumption is completely  
17 invalid.

18

19 Q. Is there such a thing as an absolutely correct level of  
20 reliability or absolutely correct reserve margin?

21 A. There really is not. What is appropriate is to  
22 establish reasonable levels for targets of reliability  
23 or percent reserve. Gulf has consistently maintained  
24 that a 20 to 25 percent reserve margin is appropriate  
25 for long range generation planning requirements. While

1       our reliability criterion, EUE, is not expected to  
2       initially trigger any additions of generation capacity,  
3       it certainly could if the reliability of our units were  
4       to decrease. Of course, providing for adequate levels  
5       of funding in base rates works to keep our reliability  
6       suitably high. We have utilized these dual criteria in  
7       reviewing with the Commission a number of rate cases,  
8       Ten Year Site Plan filings, Annual Planning Workshops,  
9       and Planning Hearings, and the Commission has agreed  
10      that these are reasonable levels.

11

12    Q. You said earlier that the Commission's own consultant  
13      reviewed the planning studies filed by Southern in the  
14      1986 Planning hearing. Did he also review the planning  
15      criteria utilized of 20 percent reserves and 0.02  
16      percent EUE?

17    A. Yes. He found both of them reasonable and consistent  
18      with normal utility practice. It is interesting to  
19      note how much his impartial assessment differs from  
20      that of Mr. Rosen.

21

22    Q. Turning to Scherer transmission line "rentals,"  
23      Mr. Shultz questions whether the amount budgeted for  
24      Scherer transmission line rents is appropriate. What  
25

1 are the various methods that Gulf considered for  
2 getting Scherer power to Gulf?

3 A. Gulf and Georgia Power began discussions regarding  
4 reasonable transmission service arrangements between  
5 the two companies well before 1987. We initially  
6 investigated the feasibility of a proxy path similar to  
7 that used for Daniel. Because of the physical  
8 arrangement of the transmission system, this proved to  
9 be impractical and illogical. Because of the high cost  
10 of the significant amount of 500 kv line involved, it  
11 would also have potentially resulted in a prohibitively  
12 high price for Gulf to pay. Another option considered  
13 was to simply build a transmission line from Scherer to  
14 Gulf. This also would have resulted in a prohibitively  
15 high price. Since no new line was needed from a  
16 transmission capacity standpoint, it just didn't make  
17 sense to build an unneeded line just in order to  
18 establish a metallic path.

19 Another method considered was for us to simply pay  
20 a standard fully embedded transmission service charge  
21 rate on the capacity. This method is universally  
22 utilized in transmission service contracts which are in  
23 place throughout the United States and has received  
24 consistent approval by the FERC. Through negotiation,  
25 Gulf has convinced Georgia to accept a modified

1 transmission service charge method that resulted in a  
2 lower price for Gulf.

3

4 Q. Did Gulf choose the lowest cost option?

5 A. Yes. Schedule 9 of my exhibit shows that Gulf's choice  
6 overwhelmingly proved to be the lowest cost option.

7

8 Q. Mr. Shultz, on page 28 of his testimony, recommends  
9 that the full amount of Scherer transmission facility  
10 expenses be disallowed because Plant Scherer capacity  
11 is "for unit power sales." Is this reasonable?

12 A. No. As I have stated earlier in this testimony, 63 mw  
13 of Plant Scherer capacity is available to serve Gulf's  
14 territorial customers in 1990. A total of 19 mw of  
15 this capacity was not even sold under UPS contracts.  
16 All the capacity has been acquired and managed for the  
17 benefit of our territorial customer. Mr. Schultz is  
18 absolutely incorrect in saying that "all" Scherer  
19 capacity is "for unit power sales."

20

21 Q. Another issue in this case addresses the appropriate  
22 cost of service methodology. Witness Scheffel Wright  
23 on pages 11 through 13 of his testimony proposes the  
24 equivalent peaker methodology, stating that this most  
25 closely fits system planning considerations. What are



1 the primary considerations a system planner evaluates  
2 in determining whether to add any generation?

3 A. Clearly, relevant considerations change over time. In  
4 Southern's early years, for example, we matched new  
5 generation capacity very closely to expected peak load.  
6 Essentially, all new capacity was hydro and it simply  
7 became a matter of how much hydro capacity to develop.  
8 Later, oil, gas, and coal steam units were added as  
9 growth in loads began to outstrip the ability of hydro  
10 resources to keep up. During the 1950's and 1960's,  
11 coal was the predominant fuel of choice for generation  
12 additions on the Southern system. The relative  
13 domestic abundance and low cost of coal, coupled with  
14 the relatively small cost of environmental compliance,  
15 made coal an extremely attractive fuel.

16 In the 1970's, when oil imports were a major  
17 national concern, any utility technology which utilized  
18 oil was basically prohibited. Now that the Fuel Use  
19 Act has been repealed, it appears that natural gas is  
20 reasonably abundant, and the system planner has a wider  
21 choice of options for adding new capacity. Widespread  
22 use of the philosophy of an optimum generation mix,  
23 which Mr. Wright uses as a basis for his method, did  
24 not really take hold until some time in the 1970's. By

25

1 that time, the bulk of Gulf's current generating  
2 resources had either been constructed or committed.

3 Also, Mr. Wright's theory only holds true for a  
4 single system, and is totally inapplicable for a  
5 pool-type operation such as that in which Gulf  
6 operates. It also ignores economies of scale, in that  
7 a small peaking unit could cost more in \$/kw than a  
8 very large base load unit. It also fails to recognize  
9 that in a pool operation, a utility might actually  
10 purchase most of its energy from other pool members  
11 during many hours. His proposal also cannot account  
12 for hydro, a peaking capacity that frequently is  
13 base-loaded in valley hours.

14 Thus, the methodology which Mr. Wright proposes  
15 does not apply at all to the system planning  
16 considerations which were in effect at the time Gulf's  
17 existing generating units were constructed. His method  
18 should be recognized for what it is -- an overly  
19 simplistic generalization which might be intellectually  
20 interesting, but which is not at all applicable on a  
21 system such as Southern.

22

23 Q. From a system planning standpoint, are there problems  
24 with the equivalent peaker method?

25

1 A. Yes. The equivalent peaker method shifts a  
2 considerable burden of funding production capacity on  
3 the high load factor user. Basically, such a customer  
4 is paying for the relatively expensive coal plants,  
5 whereas the low load factor customer is only paying for  
6 relatively inexpensive peaking capacity. Under Mr.  
7 Wright's proposed allocation, all customers would  
8 continue to pay average fuel costs for all energy  
9 utilized. Thus, the high load factor customer would  
10 pay for high cost generating capacity and high cost  
11 fuel.

12 This method would thus cause a significant shift  
13 in cost from the low load factor customer to the high  
14 load factor customer. This would discourage the high  
15 load factor customer from utilizing utility power. The  
16 result would be an increasing shift to a sharp peak and  
17 a shallow valley. Over time, this would cause a  
18 utility to add additional oil fired peaking units,  
19 underutilize the coal units, and increase oil usage.  
20 This runs exactly counter to this Commission's goals of  
21 reducing our dependence on oil and would actually  
22 violate the state's goals towards reduction of our  
23 dependence on petroleum fuel.

24  
25

1 Q. What about rate stability?

2 A. I find it very interesting that Mr. Wright states on  
3 page 10 of his testimony that one goal of proper rate  
4 setting is to establish rate continuity and stability  
5 and to avoid rate shock. Utilization of the equivalent  
6 peaker method, however, would have exactly the opposite  
7 effect, in that it would cause rate shock. As high  
8 load factor customers realize a higher cost, they will  
9 subsequently decrease their consumption of electricity  
10 in the off-peak as in all hours, especially as they  
11 convert to their own generation. This results in an  
12 increase in price for all remaining customers.

13

14 Q. Is the basic theory of the equivalent peaker method  
15 correct?

16 A. No. Mr. Wright states on page 13 of his testimony that  
17 if a utility were building a generating plant only to  
18 serve a brief peak demand, it would build the least  
19 expensive peaking units available. This theory is  
20 extremely flawed and presents one of the biggest  
21 concerns I have with his proposed method. The  
22 equivalent peaker method is only a theory. It does not  
23 recognize real life conditions.

24 Taken to its extreme, it actually suggests that a  
25 utility's generation would consist of all combustion

1 turbines if it had a sharp peak and no load in the  
2 valley. In fact, there is no utility system with such  
3 a load. Although utility load factors vary anywhere  
4 from approximately 40 percent to perhaps up to 70  
5 percent, they all typically consist of a mix of  
6 industrial, commercial, and residential load. If there  
7 were such a thing as a peak in the absence of other  
8 off-peak load, a utility simply could not afford to  
9 serve its customers with the expensive cost even of  
10 peaking generation. There must be considerable  
11 off-peak load, as well as the peak load, to justify the  
12 installation of generating equipment. In the absence  
13 of off peak load, the utility would have no choice but  
14 to attempt to buy power for the short duration of the  
15 peak or attempt through load management to simply cut  
16 the load.

17 Especially in today's market, in which many  
18 utilities are opting for bidding as a means to meet new  
19 generation, the cost to meet a sharp brief peak would  
20 be extremely unstable, vacillating wildly from year to  
21 year depending on market conditions and availability of  
22 non-utility suppliers. Such wild swings in cost would  
23 do nothing to further Mr. Wright's professed goals of  
24 stabilizing rates or providing customers with

25

1 confidence that they will be insulated from wild rate  
2 shock.

3 Q. On pages 22 and 23 of his testimony, Mr. Wright asserts  
4 that no change in fuel cost recovery would be necessary  
5 under his method? Is he correct?

6 A. Absolutely not. Basically what he is proposing is that  
7 customers with sharp peaks pay the construction costs  
8 of a peaking unit and customers with flat load pay the  
9 construction cost of a coal unit. It hardly seems fair  
10 for a customer who pays only the low capacity cost of a  
11 combustion turbine (CT) to enjoy the benefits of low  
12 cost coal energy that flow from the higher priced base  
13 load capacity for which another customer has paid.  
14 There is no way to avoid this "fuel symmetry" problem  
15 that critics of the equivalent peaker method have  
16 discovered.

17

18 Q. On pages 32 and 33 of Mr. Wright's testimony, he states  
19 "the company should estimate the rate base value of  
20 primary and higher voltage-level conductor that  
21 functions as dedicated distribution facilities, or as a  
22 higher voltage service drop, and directly assign these  
23 estimated amounts to the classes that include the  
24 customers who are served by these facilities." From a

25

1 system planning standpoint, are there conceptual flaws  
2 to this suggestion?

3 A. Yes, there are. As we expand the system to serve new  
4 load, it may happen on many occasions that a new  
5 distribution line, or even a new transmission line, may  
6 be necessary to provide the needs of a new customer.  
7 But Gulf is not dedicating these facilities solely to  
8 that customer. As new load in the vicinity develops,  
9 and it is economical to serve additional customers off  
10 this line extension that formerly served only one  
11 customer, such additional load will be added. The  
12 logical first option in serving a new customer where no  
13 facilities exist is to examine those facilities which  
14 are geographically most convenient, whether or not they  
15 serve other customers in the vicinity. We certainly do  
16 not go all the way back to the substation to serve a  
17 new customer just because existing facilities may serve  
18 only one customer. It simply isn't practical or cost  
19 effective, in general, to reserve facilities for a  
20 single customer.

21 This is especially true in the case of high  
22 voltage lines. A good recent example is our new 115 KV  
23 transmission line that serves Pensacola Naval Air  
24 Station (NAS). NAS was adding new load that could not  
25 reasonably be served over the existing 12 KV system

1 providing their service. To provide adequate service,  
2 a new 115 KV line was constructed to NAS from our Bayou  
3 Chico Substation. The only load on this existing 115  
4 KV line is the NAS load, but it is not reserved for  
5 them. We have current plans to build a new 115 KV line  
6 out of the NAS Substation on to Beach Haven Substation  
7 to provide necessary reliability to loads in this area.  
8 Thus, this 115 KV tap line will become part of the  
9 network. There are any number of situations that might  
10 arise on other 115 KV taps or 12 KV taps which serve  
11 one customer, whereby we would tap such a line to  
12 provide new customer load.

13 Thus, from a real-world perspective, Mr. Wright's  
14 suggestions simply do not match realistic system  
15 planning considerations.

16

17 Q. On page 33 of his testimony, Mr. Wright further asserts  
18 that fuel inventory should be reclassified as  
19 energy-related. Is this correct?

20 A. No. The amount of fuel inventory required for a  
21 generating plant is a function to a large degree of its  
22 capacity. There are factors which affect the required  
23 inventory of a generating plant which are far more  
24 important than the expected annual kilowatt hour  
25 generation. Since most of these relate to the megawatt



1 size of the unit, his proposal is seriously flawed.

2 Q. Would you please summarize your testimony?

3 A. Office of Public Counsel's witness, Mr. Rosen, has  
4 recommended that Gulf's 63 mw of Scherer Unit No. 3  
5 should not be included in the rate base. Mr. Rosen  
6 used incorrect numbers in his calculations which led  
7 him to this conclusion. I have shown how the numbers  
8 he used are wrong, leading him to wrong conclusions,  
9 and how this resulted in his unsupported  
10 recommendation. I have also demonstrated that Mr.  
11 Rosen is recommending that this Commission completely  
12 reverse its previous decisions regarding the prudence  
13 of Gulf's participation in Plant Scherer and the unit  
14 power sales, and that Mr. Rosen has violated every  
15 basic principle of determining prudence in attempting  
16 to fabricate an incorrect basis for a penalty to Gulf  
17 Power Company.

18 I have shown that the Scherer capacity was  
19 prudently acquired, that Gulf has marketed off-system  
20 power to the maximum extent possible, that the Scherer  
21 transmission "rental" amount proposed by Gulf is  
22 correct, and finally, that the equivalent peaker method  
23 of cost allocation and dedicated facility philosophy  
24 proposed by Mr. Wright are based on flawed assumptions.

25

1 Q. Does this conclude your testimony?

2 A. Yes.

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AFFIDAVIT

STATE OF FLORIDA        )  
                                  )  
COUNTY OF ESCAMBIA    )

Docket No. 891345-EI

Before me the undersigned authority, personally appeared  
M. W. Howell, who being first duly sworn,  
deposes and says that he/she is the Manager of Transmission  
and System Control of Gulf Power Company and that the foregoing  
is true and correct to the best of his/her knowledge, information  
and belief.

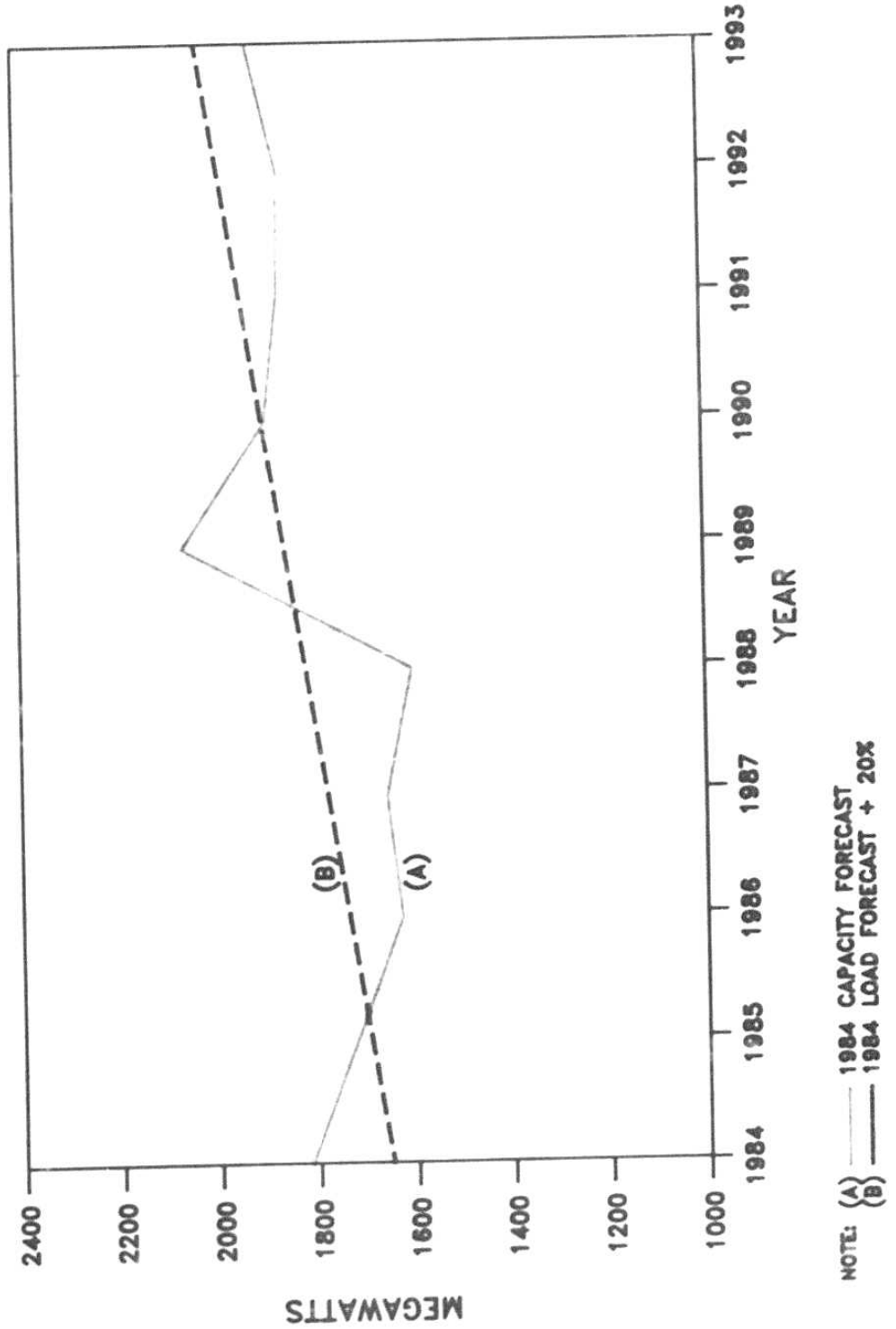
M. W. Howell

Sworn to and subscribed before me this 11th day of  
May, 1990.

Candace Klinglesmith  
Notary Public, State of Florida at Large

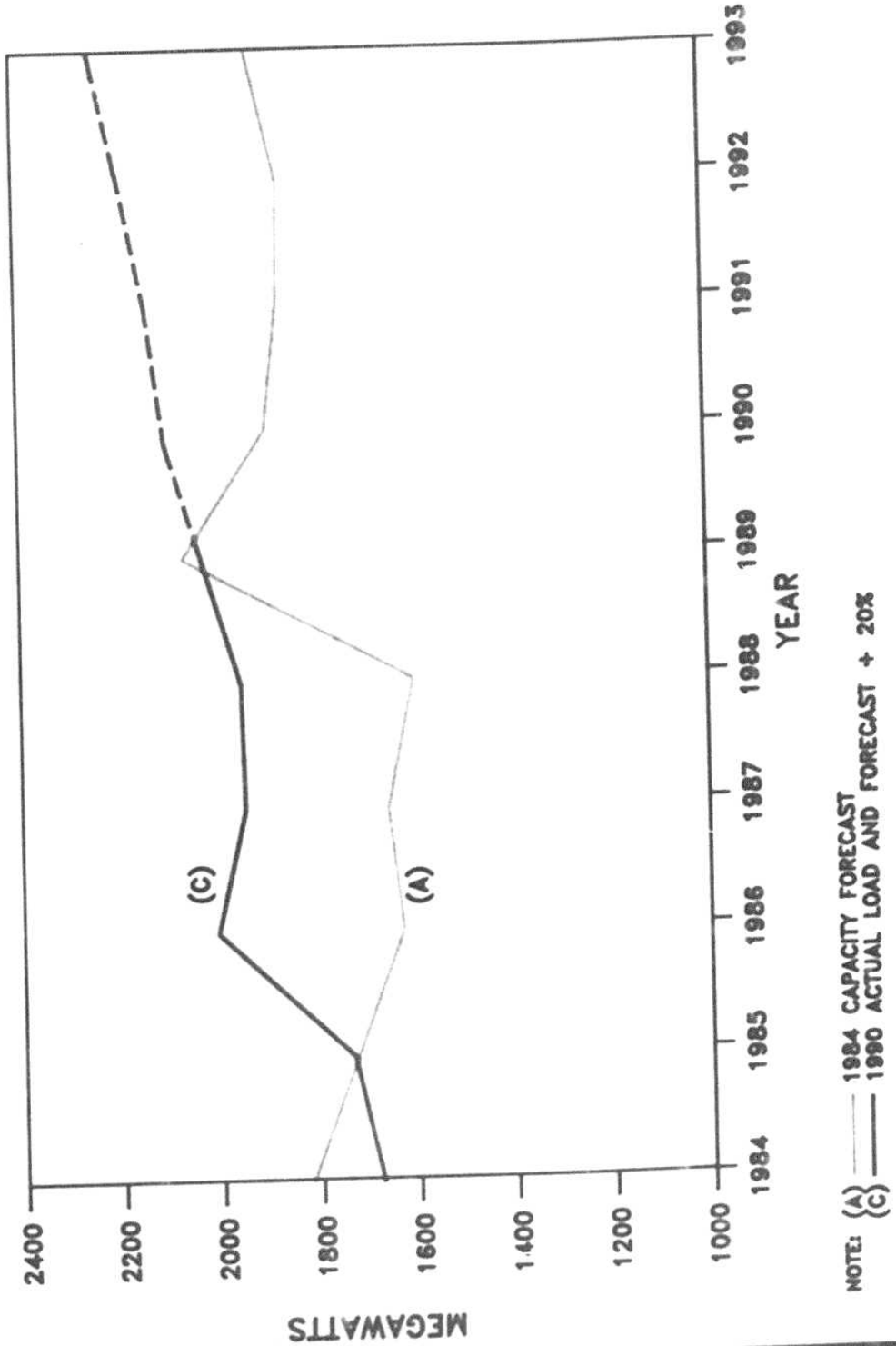
My Commission Expires: MY COMMISSION EXPIRES MAY 18, 1991

# GULF POWER COMPANY COMPARISON OF LOAD AND CAPACITY

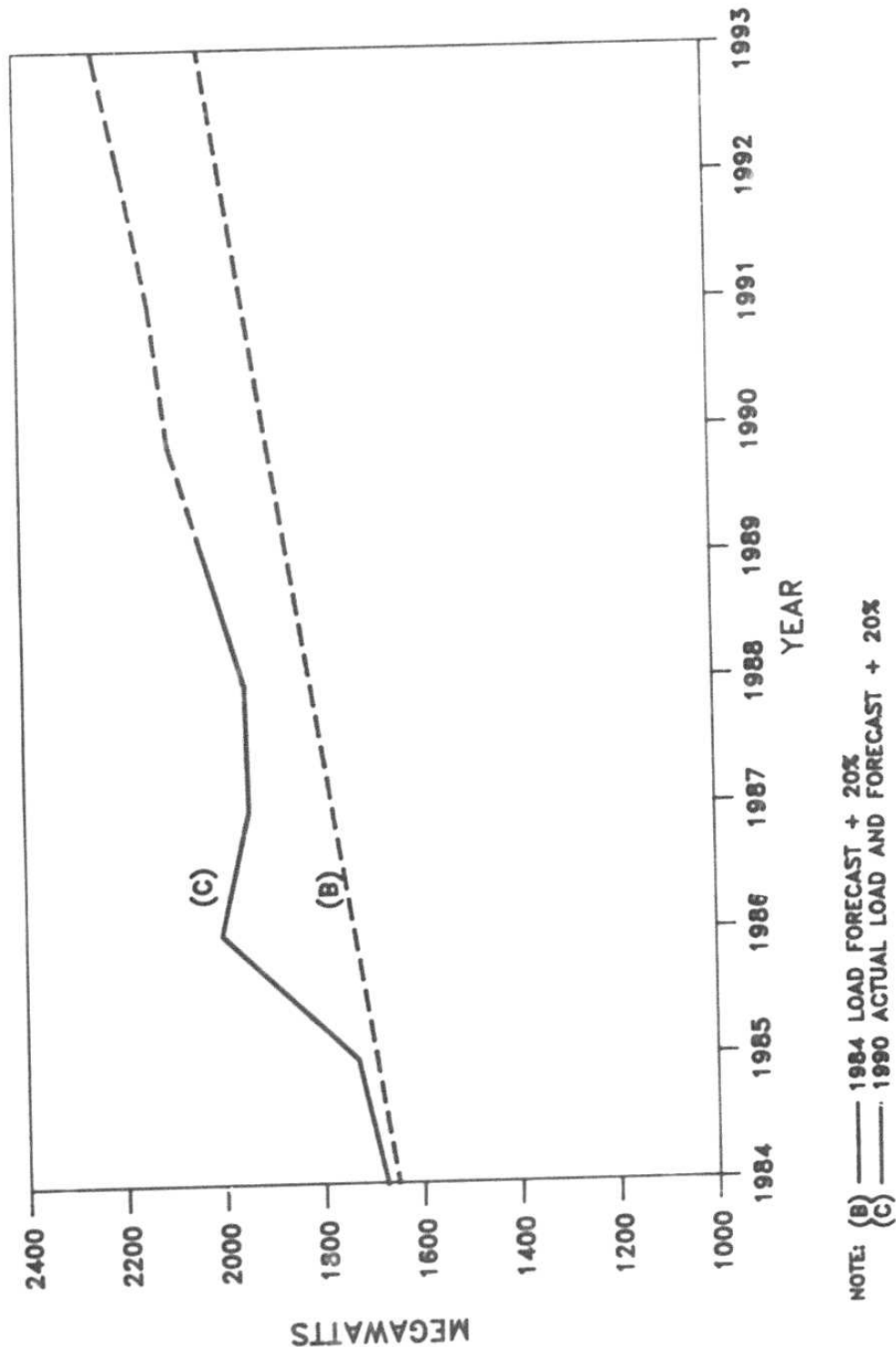


# GULF POWER COMPANY COMPARISON OF LOAD AND CAPACITY

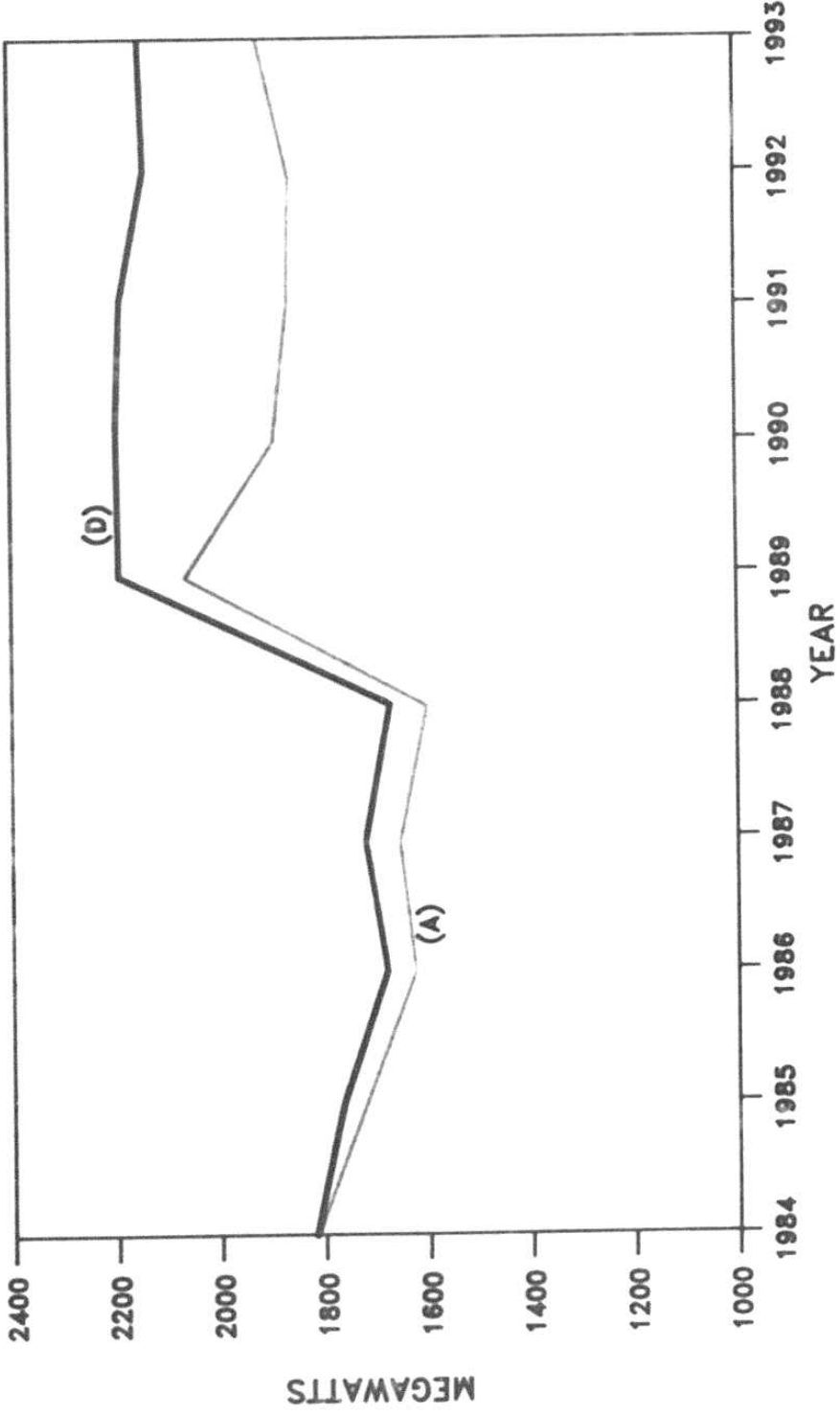
Florida Public Service Commission  
Docket No. 891345-EI  
GULF POWER COMPANY  
Witness: M. W. Howell  
Exhibit No. \_\_\_\_\_ (MWH-2)  
Schedule 2



# GULF POWER COMPANY COMPARISON OF LOAD AND CAPACITY

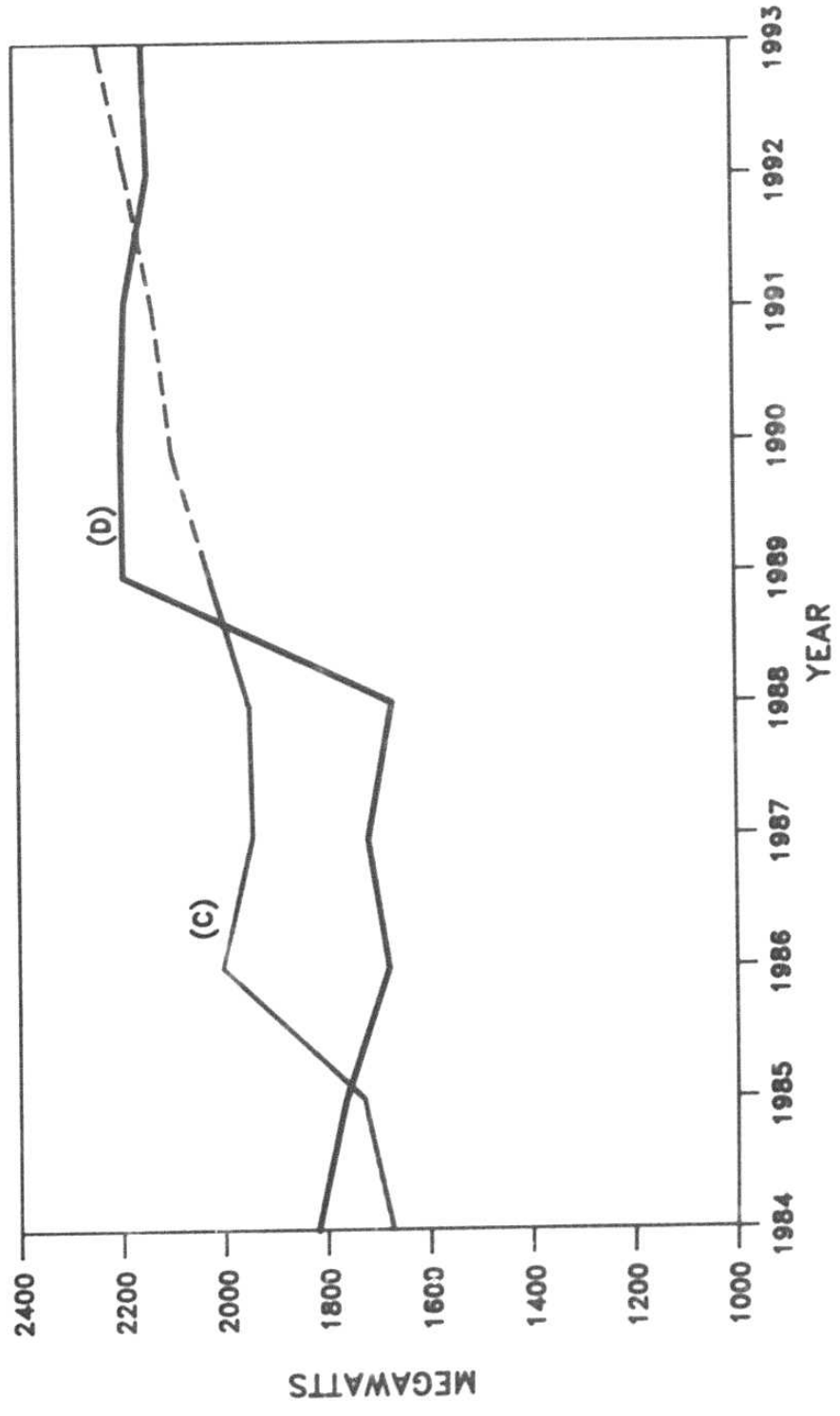


# GULF POWER COMPANY COMPARISON OF LOAD AND CAPACITY



NOTE: (A) 1984 CAPACITY FORECAST  
(B) 1990 ACTUAL CAPACITY AND FORECAST

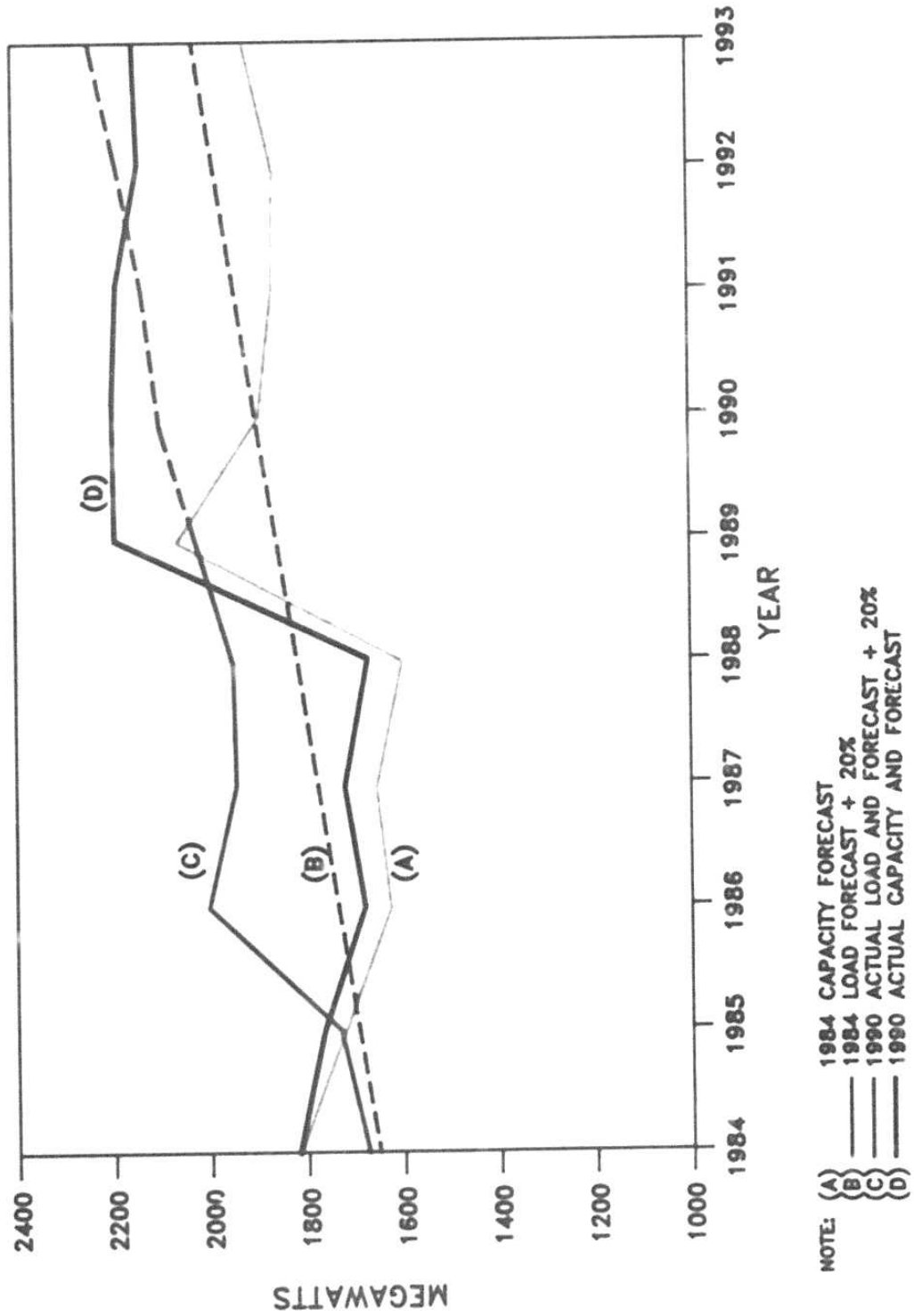
# GULF POWER COMPANY COMPARISON OF LOAD AND CAPACITY



NOTE: (C) — 1990 ACTUAL LOAD AND FORECAST + 20%  
(D) — 1990 ACTUAL CAPACITY AND FORECAST



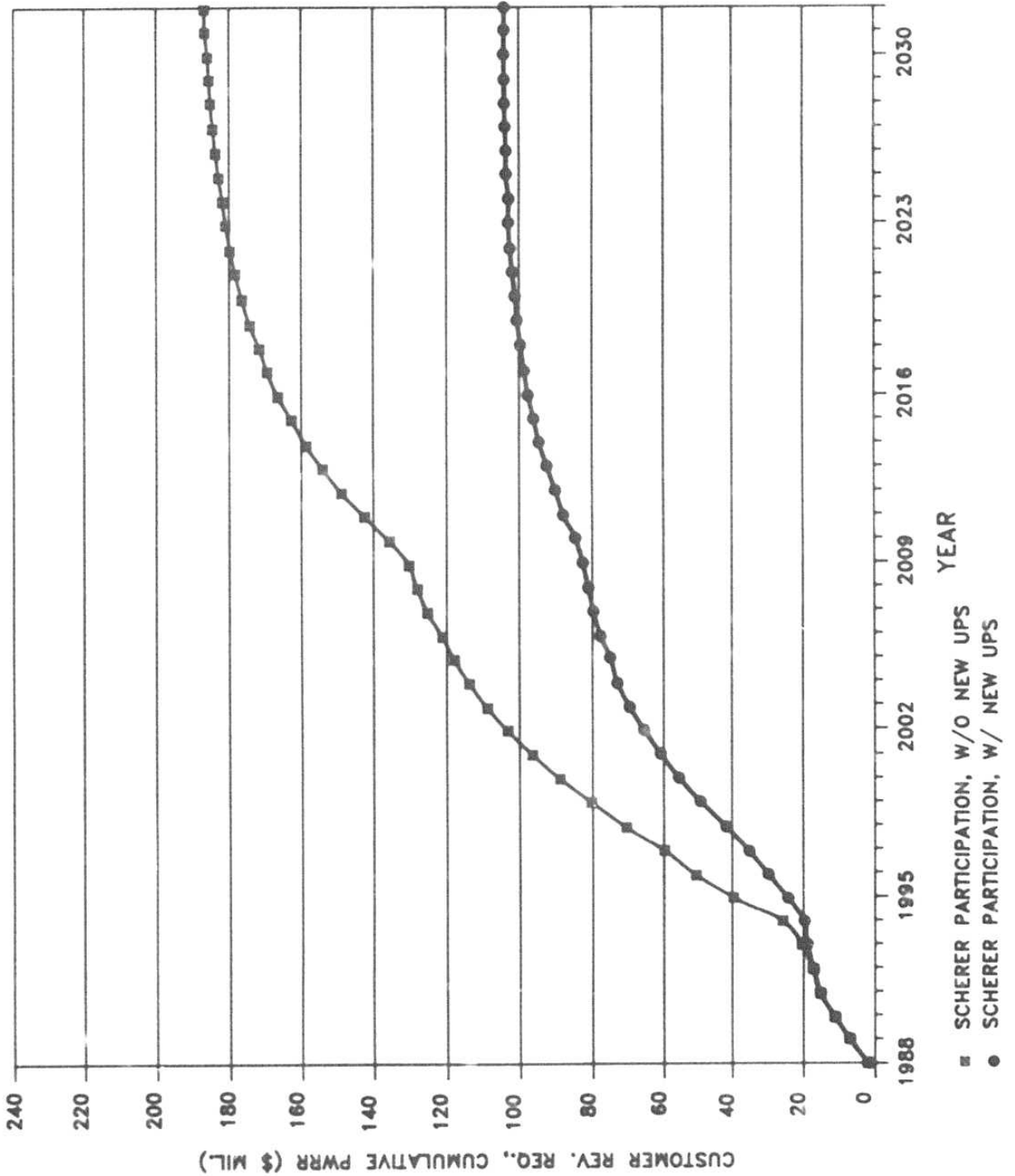
# GULF POWER COMPANY COMPARISON OF LOAD AND CAPACITY



NOTE: (A) 1984 CAPACITY FORECAST  
 (B) 1984 LOAD FORECAST + 20%  
 (C) 1990 ACTUAL LOAD AND FORECAST + 20%  
 (D) 1990 ACTUAL CAPACITY AND FORECAST

Florida Public Service Commission  
 Docket No. 891345-EI  
 GULF POWER COMPANY  
 Witness: M. W. Howell  
 Exhibit No. \_\_\_\_\_ (MWH-2)  
 Schedule 7

# CUSTOMER COST COMPARISON





Florida Public Service Commission  
Docket No. 891345-EI  
GULF POWER COMPANY  
Witness: M. W. Howell  
Exhibit No. \_\_\_\_\_ (MWH-2)  
Schedule 9

Plant Daniel  
Transmission (1981)

Annual Cost Under Proposed Agreement  
\$1,074,107

Annual Cost to Construct 230KV Transmission Line  
(Miles of Line X Cost per Mile) X (Annual Fixed Charge  
Rate) = Annual Cost  
(110 miles X \$225,000 per mile) X (.18) = \$4,455,000

Annual Cost for Transmission Service  
(Mississippi's Fully Embedded Rate + Alabama's Fully  
Embedded Rate) X (Gulf's Owned Capacity) = Annual Cost  
(\$12/KW + \$12/KW) X (507,200 KW) = \$12,172,800

Plant Scherer  
Transmission (1987)

Annual Cost Under Proposed Agreement  
\$1,626,275

Annual Cost to Construct 230 KV Transmission Line  
(Miles of Line X Cost per Mile) X (Annual Fixed Charge  
Rate) = Annual Cost  
(300 miles X \$250,000 per mile) X (.18) = \$13,500,000

Annual Cost for Transmission Service  
(Georgia's Fully Embedded Rate) X (Gulf's Owned  
Capacity) = Annual Cost  
(\$15.25/KW) X (208,300 KW) = \$3,176,575