

**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

DOCKET NO. 010949-EI

**REBUTTAL TESTIMONY AND EXHIBIT
OF
ROBERT G. MOORE**



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1 GULF POWER COMPANY
2 Before the Florida Public Service Commission
3 Rebuttal Testimony and Exhibit of
4 Robert G. Moore
5 Docket No. 010949-EI
6 In Support of Rate Relief
7 Date of Filing: January 22, 2002

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

9 A. My name is Robert Moore, and my business address is One Energy
10 Place, Pensacola, Florida 32520. I am Vice President of Power
11 Generation and Transmission at Gulf Power Company.

12 Q. Are you the same Robert G. Moore who provided testimony on Gulf
13 Power's behalf in this docket?

14 A. Yes.

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

16 A. The purpose of my rebuttal testimony is to address the testimony of
17 Mr. Helmuth W. Schultz, III, and the position taken by him with respect to
18 the issues raised concerning the production function.

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

21 A. Yes. Schedule 1 is an index to the other schedules in my exhibit. Each
22 schedule of this exhibit was prepared under my supervision and direction.
23
24
25

1 expenditures for the year ended 2001. Schedule 6 of my rebuttal exhibit
2 shows that actual construction expenditures for production for 2001 were
3 \$199,910,034, which is only 0.5% under the original budget. The results
4 of 2001 clearly support that Gulf has not overstated the production
5 construction budget.

6

7 Q. Are the benefits of construction projects reflected in the O & M expense
8 budget?

9 A. Yes. As stated on page 15 of my direct testimony, Gulf uses the Project
10 Evaluation and Prioritization System model to determine the economic
11 viability of a project. The benefit from construction projects will not always
12 appear as a reduction in the O & M expenses. Some projects are
13 performed to avoid increases in O & M expenses. Other construction
14 projects are designed to improve the efficiency (i.e. heat rate) of our units,
15 which results in fuel savings that are passed directly to customers through
16 the fuel clause. A significant number of construction projects are justified
17 because of a reduction in Equivalent Forced Outage Rate (EFOR). EFOR
18 reductions benefit the customer through reduced off system purchases,
19 especially during peak periods when the cost of electricity is highest. Any
20 impact to the O & M expense associated with a construction project has
21 already been reflected in the O & M budget.

22

23 Q. Mr. Moore, is the construction budget you have included on Schedules 9
24 and 10 of the exhibit to your direct testimony reasonable?

25 A. Yes. As I have previously stated, the amount requested in the production

1 construction budget is necessary to continue to improve heat rate, prevent
2 forced outages, control O & M, address environmental and safety
3 requirements, and otherwise help ensure the availability of efficient, low-
4 cost generation to our customers.

5

6 Q. How did the Commission establish the allowable amount of coal inventory
7 in the last rate case?

8 A. In its last rate case, Gulf requested an inventory level equal to 105 days
9 burn. The Commission did not approve this amount, but agreed to allow
10 90 days projected burn or the amount of inventory projected at each plant
11 site during the projected 1990 test year, whichever was less. The record
12 in that case indicates that the Commission determined that Gulf projected
13 at least 90 days of inventory at Plants Crist and Daniel but less than that
14 amount at Plants Smith and Scholz. The allowed amount of 784,887 tons
15 at a value of \$37 million was therefore based on 90 days burn for Plants
16 Crist and Daniel, 64.9 days burn for Smith Plant and 57.6 days burn for
17 Scholz Plant.

18

19 Q. How does the amount requested by Gulf in this case compare with the
20 amount allowed by the Commission in the last case?

21 A. In this case, Gulf is requesting 695,829 tons, or 52 days projected burn
22 compared to the previously allowed amount of 784,887 tons. Gulf is
23 asking for \$26.8 million in coal inventory as compared to the previously
24 authorized amount of \$37.0 million

25

1 Q. Is Gulf's request in this case consistent with the methodology applied by
2 the Commission in the prior case?

3 A. Yes. In the last case, Gulf and the Commission used the projected test
4 year "fuel issued to generation" to determine tons per burn day. Gulf has
5 used the same methodology in this case. However, Gulf has applied
6 sound analytical methods to determine the appropriate amount of coal
7 inventory needed in the test year, and has not simply requested what was
8 previously approved.

9
10 Q. Please comment on Mr. Schultz's position that the Commission should
11 disallow approximately 20 percent of the Company's fuel inventory
12 request.

13 A. Mr. Schultz bases his position on the amount of inventory actually
14 maintained by Gulf during the 13 month average historical year ending
15 December 2000, reported in the current rate case filing. This is not the
16 methodology applied by the Commission in the previous case, as
17 Mr. Schultz asserts. In addition to looking at the wrong time frame,
18 Mr. Schultz has not properly considered factors which made 2000 an
19 unrepresentative year in terms of coal inventory and resulted in
20 dangerously low year-end inventory levels. In this rate case filing, Gulf
21 has already reduced total tons of inventory being requested by 11 percent
22 from the amount allowed in the last rate case. I believe that to further
23 reduce this amount simply to lower carrying costs would be reckless and
24 would ultimately result in higher fuel and/or replacement power costs for
25 the customer.

1 Q. What made 2000 an unrepresentative year?

2 A. The year 2000 was a challenging year for Gulf Power from a coal supply
3 standpoint. Gulf's inventory levels dropped significantly in the last quarter
4 of 2000 due to very early and prolonged winter conditions, unprecedented
5 high natural gas prices, and the resulting increase in demand for coal fired
6 generation. The winter conditions affected coal production at the mines
7 and deliveries. Coal supplies were extremely tight throughout the country
8 due to widespread coal production problems, which affected three of
9 Gulf's eleven suppliers.

10

11 Q. What impact did these unusual conditions have on Gulf's coal inventory
12 levels?

13 A. Gulf's inventories at Plants Crist, Smith and Daniel, reached 14.7, 14.8,
14 and 14.6 normal full load burn (NFL) days, respectively. The adverse
15 market conditions described and the unusually low inventory levels
16 experienced during the year 2000 resulted in an average actual ending
17 inventory level much lower than desired. The 476,481 tons used by
18 Mr. Schultz as the basis for his recommendation is equivalent to only
19 24.8 NFL days. This would be a dangerously low target level for Gulf.

20

21 Q. Why would this be a dangerously low target level?

22 A. Some of the offshore coal supplies that are currently economic for our
23 plants are over a month away under normal conditions. The best case,
24 Illinois Basin coal, is approximately ten days away under favorable
25 weather conditions. A target inventory level of 24.8 NFL days would

1 provide very little reserve for interruptions, and could result in reliability
2 issues if Gulf were to face the type of supply reductions and delivery
3 delays that we experienced in 2000.

4
5 Q. What has happened to inventory levels since the winter of 2000?

6 A. Gulf managed to recover from the winter of 2000 and rebuild inventories
7 for the summer of 2001. Gulf's month-ending actual inventory for May
8 2001 was 873,992 tons, or 45.3 NFL days.

9
10 Q. What is the appropriate coal inventory for Gulf during the projected test
11 year?

12 A. Based on my experience, it is prudent and in the customers' best interest
13 to maintain an average inventory level of 36 NFL days, which is equivalent
14 to 52 projected burn days. During the test year, this translates to the
15 695,829 tons that Gulf requested in its MFRs. The coal market is
16 dynamic, and Gulf utilizes stockpile modeling, significant operating
17 experience, market intelligence and sound judgement to set target
18 inventory levels that are sensitive to market conditions, will assure
19 reliability and provide adequate price protection to the customer. It would
20 not be advisable to arbitrarily use historical data in setting inventory
21 targets for the future, as Mr. Schultz suggests. Inventory levels should
22 reflect not only historical trends, but also experience-based knowledge
23 such as operational and capacity factors, changes in economic conditions,
24 fuel markets, weather patterns, reliability, and other additional risks,
25 including those arising out of the events of September 11, 2001.

1 Q. Are there any other reasons to support Gulf's requested inventory level?

2 A. Yes. Gulf believes that it would not be in the customers' best interest to
3 further lower the authorized inventory level. Such action would result in
4 higher fuel costs, especially during periods when fuel supplies are scarce.
5 Although Gulf's primary purpose for maintaining an adequate fuel
6 inventory is reliability, it must be recognized that a healthy inventory level
7 provides some price protection to the customer from adverse market
8 conditions. Gulf's stockpile modeling and inventory target setting efforts
9 are prudent and well thought out, and are designed to achieve an
10 optimum inventory level that measures the cost of replacement fuel and/or
11 energy against the holding cost of inventory. The level of inventory
12 suggested by Mr. Schultz does not take these dynamics into account.

13
14 Q. Is Mr. Schultz's working capital adjustment to in-transit coal appropriate?

15 A. No. Mr. Schultz's arbitrary 20 percent reduction of in-transit coal
16 demonstrates his lack of knowledge of how coal-fired power plants
17 operate. The purpose of in-transit coal is to assure an adequate supply of
18 coal to meet burn requirements. In order to maintain a desired stockpile
19 level, the amount of coal in-transit must approximate the burn.
20 Furthermore, the importance of maintaining an adequate inventory and a
21 sufficient flow of fuel to the power plants has become even more acute
22 since the events of September 11, 2001. The increased risk of a
23 disrupting event occurring in either the fuel supply and transportation
24 sector or the power generation and transmission sector has placed new
25 emphasis on the need to assure the availability of each and every

1 generation facility in the country. Gulf has requested an amount of fuel
2 inventory and in-transit coal that we believe will minimize these kinds of
3 risks at a reasonable cost.

4
5 Q. Mr. Moore, do you have any concerns relating to the exhibit prepared by
6 Mr. Schultz (HWS-6)?

7 A. Yes. The comparison made by Mr. Schultz on lines 16 through 19 of
8 Schedule 6 of his exhibit is inaccurate. The basis for Schedule 6 was
9 Gulf's response to Citizens' Interrogatory No.18 that read,

10 Production O & M. Provide a summary by year, by
11 category, of planned outages and other maintenance
12 costs, as described on page 6 of Mr. Moore's
13 testimony, for the years 1995-2000, 2001 to date and
14 projected 2001 to 2003. Also include a breakdown
15 for the test year.

16 The baseline, outage and special project designations described on
17 page 6 of my direct testimony are generally used within the power plants
18 and apply to all accounts used within the plants. Therefore, the
19 information provided in Gulf's response to this interrogatory included only
20 those items budgeted or incurred within the plants, which includes
21 Production Steam, Production Other, Other Power Supply, and Production
22 Related A & G. The response to Interrogatory No. 18 did not include
23 charges to production expenses that occur outside the plant (i.e.
24 corporate functions). Mr. Schultz apparently took the total dollars included
25 in our response to Interrogatory No. 18 and made a comparison to the
26 Benchmark for

1 Production Steam, which does include these amounts. Based on this
2 misunderstanding, the resulting adjustment discussed on page 24 of his
3 testimony is inaccurate.

4
5 Q. Have you prepared a schedule that outlines actual Production Steam,
6 Production Other, and Production Other Power Supply for the period
7 included in Mr. Schultz's exhibit?

8 A. Yes. Schedule 2 of my rebuttal exhibit reflects the actual expenses for
9 1996 through 2000, the 5-year average for that period, the actual
10 expenses for 2001, and the test year budget. The test year budget dollars
11 reflected on this schedule are consistent with Schedule 7 of the exhibit to
12 my direct testimony.

13
14 Q. On page 23 of his testimony Mr. Schultz indicates that he does not know
15 why there is a difference between the benchmark variance of \$5.8 million
16 for production steam referred to on Schedule 7 of your direct testimony
17 and his Schedule 6. Can you explain the difference?

18 A. Yes. As I indicated earlier, Schedule 6 of Mr. Schultz's exhibit to his
19 testimony did not include all dollars for Production Steam. Schedule 2 of
20 the exhibit to my rebuttal testimony includes all expenses for Production
21 Steam, Other Production, and Other Power Supply. The variance for
22 Production Steam on Schedule 2 of my rebuttal exhibit is consistent with
23 Schedule 7 of my direct testimony.

24
25

1 Q. Have you recalculated the recommended adjustments using Mr. Schultz's
2 methodology for Production Steam?

3 A. Yes. Applying the logic used by Mr. Schultz, I have taken the amount
4 included in the historical year of \$63,562,361 and inflated that by the
5 change in the compound multiplier for average CPI between 2000 and
6 2002 (.05165). The result is \$66,845,356, which leaves a variance of
7 \$1,761,356 compared to the one calculated by Mr. Schultz of \$8,930,618.
8 The \$1,761,356 variance calculated using Mr. Schultz's methodology is
9 substantially under the \$5,786,000 benchmark variance that I have
10 already explained in my direct testimony.

11

12 Q. Is the amount Gulf has requested for planned outages in the test year
13 representative of the amounts expected in the future years?

14 A. Yes. Schedule 5 of the exhibit to my direct testimony includes a planned
15 outage schedule for the test year and for the five-year period from 2002
16 through 2006. This schedule clearly shows that the \$13,979,818
17 requested for planned outages in the test year is below the projected five-
18 year average of \$15,749,008.

19

20 Q. On pages 22 and 23 of his testimony, Mr. Schultz expresses a concern
21 regarding an increase in special projects to \$3.0 million in 2001 and
22 \$2.7 million in the projected test year. Please comment.

23 A. In preparing my rebuttal testimony, I discovered an error on page 2 of our
24 response to Citizens' Interrogatory No. 18. That response showed
25 \$2,650,000 projected for special projects for 2001. The correct amount

1 should have been \$952,879.

2

3 Q. Does this correction eliminate the concern expressed by Mr. Schultz?

4 A. No. Because the projected test year amount remains at \$2.7 million, it
5 simply shifts the major focus of his concern from 2001 to the projected
6 test year.

7

8 Q. Please explain why Gulf is projecting an increase in special projects in the
9 projected test year?

10 A. As I stated in my direct testimony, special projects expenses are for
11 projects significant in cost that are tracked individually to enhance cost
12 control and ensure acceptable performance. Although a particular special
13 project may not occur annually, there will be special projects that have to
14 be completed each year. The level of special projects costs included in
15 the test year is representative of costs that will be incurred in future years.
16 In the past, special projects would have been included as baseline. We
17 now break these out separately. This change in our process has helped
18 Gulf better manage costs. We have continually looked for ways to
19 improve so that we can continue to provide low cost reliable generation.
20 Breaking out special projects from baseline provided Gulf with a means by
21 which to better manage those dollars, to ensure that the right dollars were
22 spent on the right issues to maximize the benefit in terms of performance,
23 reliability, and efficiency.

24

25

1 Q. Mr. Moore, can you give us an example of an item that Gulf has included
2 as special project?

3 A. Yes. In 2002, Gulf has money budgeted to rebuild coal chutes. In Gulf's
4 definition, this is not a one-time event, but recurs frequently and is directly
5 related to the tons of coal processed through that conveyor system.
6

7 Q. Mr. Moore, have the requirements for maintaining Gulf's fleet of
8 generating units changed since 1996 and is the maintenance amount
9 requested for the test year consistent with the amount required in the
10 future for production expenses?

11 A. Yes. Schedule 2 of my rebuttal exhibit clearly shows that in 1996, Gulf's
12 actual expenses for Production were \$55,260,698 and had increased to
13 \$66,258,414 by the year 2000. This increase supports our conclusion that
14 the increasing age of our units and the increased generation requirement
15 on those units is resulting in an increase in required O & M dollars.
16 Schedule 4 of my rebuttal exhibit shows that the request for the test year
17 is below the five-year average of 2002 through 2006 by \$9,571,874.
18

19 Q. Mr. Moore, on page 21 of his testimony Mr. Schultz begins to make
20 comparisons of the historical year to the test year; do you have any
21 concerns with the basis for this comparison?

22 A. Yes. As I stated earlier, Mr. Schultz's Schedule 6 only includes total
23 expense budgeted to Plants Crist, Smith, Scholz, and Daniel. An
24 accurate comparison would include all of Gulf's production expenses.
25

1 Q. Have you prepared a schedule that breaks out all Production expenses as
2 planned outage or baseline/special projects?

3 A. Yes. Schedule 3 of my rebuttal exhibit reflects the actual expenses for
4 1996 through 2000, the five-year average for that period, the actual
5 expenses for 2001, and the test year budget.
6

7 Q. What is the cause of the increase in planned outage dollars from 2001 to
8 the test year?

9 A. Earlier in my testimony I explained the increase from the Benchmark to
10 the test year. The explanation for the increase from 2001 to the test year
11 is the same. The increase in outage dollars is due, in part, to the
12 additional maintenance costs associated with the increased amounts of
13 generation required. Every generating unit on Gulf's system is at least
14 25 years old with the exception of Daniel Unit 2, which is 21 years old.
15 Scholz Units 1 & 2 will celebrate their 50th anniversary of service in 2003.
16 However, through effective maintenance practices, Gulf has been able to
17 maintain all of the generating units in a manner that provides reliable low
18 cost electricity to our customers. In addition, effective maintenance
19 practices have allowed Gulf to avoid costly new construction of generating
20 facilities to replace existing generating capacity. As Gulf's generating fleet
21 ages, and as the cost to maintain these units increases, Gulf will continue
22 to evaluate alternatives. In today's market, the cost of maintaining the
23 units is the best alternative for our customers.

24 Generally, the changes in planned outage dollars from year to year
25 are driven by the scope of the outage work. Original Equipment

1 Manufacturer's recommendations, unit history, unit efficiencies, and
2 maintenance issues are all taken into consideration when determining the
3 scope of a planned outage. Schedule 5 of my direct testimony provides a
4 listing of the planned outages for the test year and the five-year period
5 2002 through 2006. Gulf's response to Citizens' Interrogatory No. 88
6 provided a detailed description of the outages scheduled for the test year.

7

8 Q. What is the increase from 2001 to the test year in baseline and special
9 projects?

10 A. As shown on Schedule 3 of my rebuttal exhibit, the increase from 2001 to
11 the test year for baseline and special projects is \$7,631,478.

12

13 Q. What is the cause of the increase in baseline and special projects from
14 2001 to the test year?

15 A. The addition of Smith 3 resulted in an increase in O & M of \$3,376,000
16 and is the major contributor to the increase. These dollars are necessary
17 to operate and maintain the new unit. I have provided details associated
18 with these dollars in my direct testimony.

19 The change in the compound multiplier from 2001 to 2002 would
20 result in an increase to labor, materials and contract labor of \$1,383,485.

21 In order to maintain compliance with environmental permitting,
22 Plant Smith has increased costs associated with the ash handling system
23 by \$730,000.

24 To continue our support of Gulf's increased emphasis of employee
25 effectiveness and comply with all OSHA requirements, Gulf has increased

1 O & M expenses associated with training and safety by \$339,000.

2 As I have already stated, the remaining \$1,802,993 is due to the
3 additional maintenance costs associated with the increased amount of
4 generation required from our existing fleet. In addition, we now use
5 diagnostic tools that were not available in 1990 such as thermography,
6 boiler mapping, tube sampling, non-destructive examination, and motor
7 signature testing. These tools have enhanced our ability to identify
8 maintenance issues that help reduce EFOR and provide reliable, low cost
9 generation to our customers.

10

11 Q. Is the increase from 2001 to the test year for baseline and special projects
12 a one-time increase?

13 A. No. As I discussed in my direct testimony, Gulf has been proactive in
14 implementing several major preventive maintenance programs that have
15 improved the overall effectiveness of scheduling and planning processes.
16 One program is the Plant Reliability Optimization (PRO) program that was
17 developed in partnership with the Electric Power Research Institute
18 (EPRI). PRO is a maintenance process that seeks to produce the
19 appropriate balance between corrective maintenance, preventive
20 maintenance, and predictive maintenance. PRO combines all diagnostic,
21 maintenance, financial, and process data into an effective decision-
22 making tool. The ultimate goal is to perform maintenance at the least cost
23 while maximizing equipment reliability. The EFOR for Gulf's units has
24 declined significantly since 1997, in part, because of efforts that have
25 more effectively targeted preventive maintenance costs to those

1 preventive maintenance projects that have the greatest impact. These
2 EFOR reductions have occurred even though total generation for Gulf's
3 units has increased 25 percent from 1997 to 2000. This results in direct
4 cost savings to the customers by minimizing replacement power costs.
5 While some of the items discussed above will not occur annually, other
6 projects will replace these items in subsequent years due to the dynamics
7 of power plants.

8

9 Q. Mr. Moore, on page 24 of his testimony, Mr. Schultz states that Gulf has
10 been underspending. Has Gulf's production function underspent?

11 A. No. In 1990 the Commission established rates that allowed Gulf to
12 effectively serve our customers with reliable, low cost electricity. Through
13 1998, Gulf was able to operate within those rates through the effective
14 management of the limited resources available. Gulf's high customer
15 satisfaction ratings and low EFOR attest to the success of our strategy.
16 Had Gulf underspent, customers would have suffered through higher fuel
17 cost because Gulf would not have taken advantage of opportunities to
18 improve unit efficiency. Customers would have suffered through higher
19 forced outage rates which would have required Gulf to buy replacement
20 power at a higher price. This higher price would have been passed on to
21 the customers. Overall, such an erosion in the value of our product would
22 have caused customer satisfaction to deteriorate. The reason we stand
23 before this Commission today is because we have done all we can to
24 operate under the current rate structure. The trend of spending beyond
25 our benchmark for production, as documented in my Schedule 3, clearly

1 demonstrates Gulf has not underspent. Rather, this trend supports Gulf's
2 need for the additional funds requested in this proceeding. The low rates
3 and reliable service our customers have enjoyed in the past clearly
4 support Gulf's determination to spend prudently. The dollars we are
5 asking for in the future are prudent and necessary to continue to efficiently
6 and effectively serve our customers.

7

8 Q. Please summarize your testimony.

9 A. I have provided additional testimony that clearly demonstrates that the
10 Production Construction budget is reasonable and, based on the results
11 of 2001, accurately reflects the dollars that will be spent and should be
12 included as production plant additions. Furthermore, I have provided
13 additional clarification of the benefits associated with construction projects
14 and how the customers benefit from these projects.

15 Gulf's stockpile modeling and inventory target setting efforts are
16 prudent, designed to achieve an optimum inventory level that measures
17 the cost of replacement fuel and/or energy against holding down cost of
18 inventory. The amount Gulf has requested in working capital for fuel is
19 prudent and reasonable.

20 We have clearly justified the maintenance dollars Gulf is requesting
21 for Production Steam, Production Other and Other Power Supply relative
22 to the Benchmark variance.

23

24 Q. Does this conclude your testimony?

25 A. Yes.

Florida Public Service Commission
Docket No. 010949-EI
GULF POWER COMPANY
Witness: R.G. Moore
Exhibit No. ____ (RGM-2)
Schedule 1

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Production O&M Expense Analysis

Production Steam	Actual	Actual	Actual	Actual	Actual	5 Year	Actual	Budget
FERC 500 - 514	1996	1997	1998	1999	2000	Average	2001	Test Year
Actuals/Budget	\$ 53,747,577	\$ 51,456,989	\$ 57,256,449	\$ 62,324,896	\$ 63,562,361	57,669,655	\$ 62,798,204	\$ 70,870,000
Compound Multiplier (C-56)	1.20046	1.22953	1.25784	1.27544	1.31829		1.35272	
Benchmark	\$ 56,355,595	\$ 57,720,286	\$ 59,049,299	\$ 59,875,531	\$ 61,887,124	58,977,567	\$ 63,503,440	\$ 65,084,000
Variance	\$ (2,608,017)	\$ (6,263,297)	\$ (1,792,850)	\$ 2,449,365	\$ 1,675,237	(1,307,912)	\$ (705,237)	\$ 5,786,000

46,945,000 X compound multiplier

Other Production	Actual	Actual	Actual	Actual	Actual	5 Year	Actual	Budget
FERC 546 - 554	1996	1997	1998	1999	2000	Average	2001	Test Year
Actuals/Budget	\$ 152,597	\$ 88,265	\$ 395,149	\$ 1,112,816	\$ 649,093	479,584	\$ 587,357	\$ 3,905,000
Compound Multiplier (C-56)	1.20046	1.22953	1.25784	1.27544	1.31829		1.35272	
Benchmark	\$ 56,422	\$ 57,788	\$ 59,118	\$ 59,946	\$ 61,960	59,047	\$ 63,578	\$ 65,000
Variance	\$ 96,175	\$ 30,477	\$ 336,031	\$ 1,052,870	\$ 587,133	420,537	\$ 523,779	\$ 3,840,000

47,000 X Compound Multiplier

Other Power Supply	Actual	Actual	Actual	Actual	Actual	5 Year	Actual	Budget
FERC 556-557	1996	1997	1998	1999	2000	Average	2001	Test Year
Actuals/Budget	\$ 1,360,524	\$ 1,938,122	\$ 1,958,035	\$ 2,544,962	\$ 2,046,960	1,969,721	\$ 2,519,122	\$ 2,427,000
Compound Multiplier (C-56)	1.20046	1.22953	1.25784	1.27544	1.31829		1.35272	
Benchmark	\$ 1,159,644	\$ 1,187,726	\$ 1,215,073	\$ 1,232,075	\$ 1,273,468	1,184,181	\$ 1,306,728	\$ 1,339,000
Variance	\$ 200,880	\$ 750,396	\$ 742,962	\$ 1,312,887	\$ 773,492	\$ 785,540	\$ 1,212,395	\$ 1,088,000

966,000 X Compound Multiplier

Grand Total	\$ 55,260,698	\$ 53,483,376	\$ 59,609,633	\$ 65,982,674	\$ 66,258,414	\$ 60,118,959	\$ 65,904,683	\$ 77,202,000
% Change		(0.03)	0.10	0.10	0.00	(0.10)	0.09	0.15
Benchmark	\$ 57,571,661	\$ 58,965,800	\$ 60,323,491	\$ 61,167,552	\$ 63,222,552	\$ 60,220,794	\$ 64,873,746	\$ 66,488,000
Variance	\$ (2,310,962)	\$ (5,482,423)	\$ (713,858)	\$ 4,815,123	\$ 3,035,862	\$ (101,835)	\$ 1,030,937	\$ 10,714,000

Planned Outage, Baseline/Special Project Analysis

Total Production	Actual	Actual	Actual	Actual	Actual	5 Year	Actual	Budget
FERC 500-557	1996	1997	1998	1999	2000	Average	2001	Test Year
Actuals/Budget	\$ 55,260,698	\$ 53,483,376	\$ 59,609,633	\$ 65,982,674	\$ 66,258,414	60,118,959	\$ 65,904,683	\$ 77,202,000
Compound Multiplier (C-56)	1.20046	1.22953	1.25784	1.27544	1.31829		1.35272	
Benchmark	\$ 57,571,661	\$ 58,965,800	\$ 60,323,491	\$ 61,167,552	\$ 63,222,552	60,250,211	\$ 64,873,746	\$ 66,488,000
Variance	\$ (2,310,962)	\$ (5,482,423)	\$ (713,858)	\$ 4,815,123	\$ 3,035,862	(131,252)	\$ 1,030,937	\$ 10,714,000

Planned Outage	Actual	Actual	Actual	Actual	Actual	5 Year	Actual	Budget
	1996	1997	1998	1999	2000	Average	2001	Test Year
Actuals/Budget	\$ 9,484,662	\$ 4,889,447	\$ 8,479,983	\$ 11,095,308	\$ 10,919,524	8,973,785	\$ 10,313,979	\$ 13,979,818
Compound Multiplier (C-56)	1.20046	1.22953	1.25784	1.27544	1.31829		1.35272	
Benchmark	7,076,712	7,248,079	7,414,967	7,518,719	7,771,320	7,405,959	7,974,284	\$ 8,173,000
Variance	\$ 2,407,950	\$ (2,358,632)	\$ 1,065,016	\$ 3,576,589	\$ 3,148,204	1,567,826	\$ 2,339,695	\$ 5,806,818

Baseline/ Special Projects	Actual	Actual	Actual	Actual	Actual	5 Year	Actual	Budget
	1996	1997	1998	1999	2000	Average	2001	Test Year
Actuals/Budget	\$ 45,776,036	\$ 48,593,929	\$ 51,129,650	\$ 54,887,366	\$ 55,338,890	51,145,174	\$ 55,590,704	\$ 63,222,182
Compound Multiplier (C-56)	1.20046	1.22953	1.25784	1.27544	1.31829		1.35272	
Benchmark	\$ 50,494,949	\$ 51,717,720	\$ 52,908,524	\$ 53,648,833	\$ 55,451,232	52,844,252	\$ 56,899,461	\$ 58,315,000
Variance	\$ (4,718,913)	\$ (3,123,791)	\$ (1,778,874)	\$ 1,238,533	\$ (112,342)	\$ (1,699,077)	\$ (1,308,758)	\$ 4,907,182

Grand Total	\$ 55,260,698	\$ 53,483,376	\$ 59,609,633	\$ 65,982,674	\$ 66,258,414	\$ 60,118,959	\$ 65,904,683	\$ 77,202,000
% Change		(0.03)	0.10	0.10	0.00	(0.10)	0.09	0.15
Benchmark	\$ 57,571,661	\$ 58,965,800	\$ 60,323,491	\$ 61,167,552	\$ 63,222,552	\$ 60,220,794	\$ 64,873,746	\$ 66,488,000
Variance	\$ (2,310,962)	\$ (5,482,423)	\$ (713,858)	\$ 4,815,123	\$ 3,035,862	\$ (101,835)	\$ 1,030,937	\$ 10,714,000

Production O&M Expense Analysis 2002-2006

Production Steam	Budget	Budget	Budget	Budget	Budget	Budget
FERC 500 - 514	Test Year	2002	2003	2004	2005	2006
Budget	\$ 70,870,000	\$ 79,801,962	\$ 74,945,270	\$ 79,827,060	\$ 78,745,415	\$ 84,902,224

Other Production	Budget	Budget	Budget	Budget	Budget	Budget
FERC 546 - 554	Test Year	2002	2003	2004	2005	2006
Budget	\$ 3,905,000	\$ 2,392,386	\$ 4,463,901	\$ 5,172,751	\$ 5,263,091	\$ 5,396,000

Other Power Supply	Budget	Budget	Budget	Budget	Budget	Budget
FERC 556-557	Test Year	2002	2003	2004	2005	2006
Budget	\$ 2,427,000	\$ 2,400,145	\$ 2,476,835	\$ 2,635,599	\$ 2,693,336	\$ 2,753,395

Grand Total	\$ 77,202,000	\$ 84,594,493	\$ 81,886,006	\$ 87,635,410	\$ 86,701,842	\$ 93,051,619
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5 Year Average \$ 86,773,874

Planned Outage, Baseline/Special Project Analysis 2002 - 2006

Total Production	Budget	Budget	Budget	Budget	Budget	Budget
	Test Year	2002	2003	2004	2005	2006
Budget	\$ 77,202,000	\$ 84,594,493	\$ 81,886,006	\$ 87,635,410	\$ 86,701,842	\$ 93,051,619

Planned Outage	Budget	Budget	Budget	Budget	Budget	Budget
	Test Year	2002	2003	2004	2005	2006
Budget	\$ 13,979,818	\$ 19,821,435	\$ 14,826,563	\$ 14,999,735	\$ 11,917,804	17,179,505

Baseline/ Special Projects	Budget	Budget	Budget	Budget	Budget	Budget
	Test Year	2002	2003	2004	2005	2006
Budget	\$ 63,222,182	\$ 64,773,058	\$ 67,059,443	\$ 72,635,675	\$ 74,784,038	\$ 75,872,114

Grand Total	\$ 77,202,000	\$ 84,594,493	\$ 81,886,006	\$ 87,635,410	\$ 86,701,842	\$ 93,051,619
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Revised January 28, 2002

Project	Description	Actuals 2001	Budget 2001	Variance	%
Combined Cycle Project					
28	Combined Cycle Project-unit 3-plant Smith	172,336,156	174,257,990	(1,921,834)	-1%
Crist					
1100	Crist-misc. Steam Plant Additions & Imp.	549,515	700,000	(150,485)	-21%
1112	Crist 7 Upper Economizer	1,182,821	1,700,000	(517,179)	-30%
1114	Crist-1-7 Turbine Roof	2,073,710	1,200,000	873,710	73%
1115	Crist-7 Reheater	1,516,488	1,300,000	216,488	17%
1122	Crist 6 Superheater Final	1,732,456	2,400,000	(667,544)	-28%
1123	Crist 1-7 No.3 Deminearlizer Controls	274,221	300,000	(25,779)	-9%
1140	Crist 6 Turbine Controls	1,745,926	1,200,000	545,926	45%
1144	Cist 4 & 5 Vacuum Pump	0	300,000	(300,000)	-100%
1154	Ecrc-air-crist-cems Replacement	300,478	250,000	50,478	20%
1155	Ecrc-water-install Raw Water Well Flowmeters	15,815	9,325	6,490	70%
1158	Crist Unit 4 Replacement Of Reheat Front And Rear Assen	13,195	13,203	(8)	0%
1160	Crist 5 Replace Finishing Superheater	319,049	700,000	(380,951)	-54%
1161	Crist 5 Replace Reheater	990,567	1,000,000	(9,433)	-1%
1167	Crist 6 -replace Cold End Air Heater Baskets	123,875	200,000	(76,125)	-38%
1168	Crist 7 - Relace Cold End Air Heater Baskets	258,364	250,000	8,364	3%
1172	Crist 7 -replace Coal Feeders	575,434	300,000	275,434	92%
1176	Envir-waste-crist Units 4-7 Flyash Landfill Zone 3a Devel	74,967	200,000	(125,033)	-63%
1178	Crist 1-7 New Raw Water Supply Well	0	(71)	71	-100%
1185	Crist 5 Replace Air Heater Baskets	366,999	400,000	(33,001)	-8%
1186	Crist 4 Replace Air Heater Baskets	8,064	8,069	(5)	0%
1189	Crist 6 Replace Boiler Controls	942,772	800,000	142,772	18%
1200	Crist 4-7 Tractor Blade	0	65,000	(65,000)	-100%
1201	Crist 4-7 Tractor	1,219,107	0	1,219,107	100%
1202	Crist 4-7 Fuel Handling Gearbox	61,208	100,000	(38,792)	-39%
1203	Crist 4-5 Belt Changeouts	270,399	150,000	120,399	80%
1209	Planning Department Building	0	0	0	100%
1210	Repl Units 4-6 Conveyor Sys Switchgear For Fuel Handling	39,444	140,000	(100,556)	-72%
1212	Envir-waste-crist Capping Flyash Landfill Cell No 2a	70,755	0	70,755	100%
1233	Crist 1 Waterwall Tube Repl	0	0	0	100%
1236	Crist 6 Replace Condenser Tubes	0	0	0	100%
1239	Crist 7 Generator Rotor Rewind	0	0	0	100%
1243	Environ-water-unit 6 & 7 Cooling Tower Chemical Feed Sy:	83,993	18,970	65,023	343%
1244	Ecrc-air-rata Cem Test Trl Monitors	27,941	30,000	(2,059)	-7%
1248	Envir-waste-bottom Ash Hydrobin Replacement	1,085,809	1,200,000	(114,191)	-10%
1249	E-crane Coal Unloader	589	0	589	100%
1250	Replace Unit 6 Vacuum Pumps	0	360,000	(360,000)	-100%
1251	Replace Four (4) Sump Pumps	152,682	310,000	(157,318)	-51%
1252	Replace Mobile Crane	305,988	250,000	55,988	22%
1264	Crist Unit # 7 Generator Lead Bushings	416,708	0	416,708	100%
1265	Crist Unit 7 Hydrogen Dryer	9,870	0	9,870	100%
1266	Crist Unit 7 Boiler Control Retrofit	2,036	0	2,036	100%
		<u>16,811,246</u>	<u>15,854,496</u>	<u>956,750</u>	<u>6%</u>

Project	Description	Actuals 2001	Budget 2001	Variance	
Scholz					
1300	Scholz-misc. Steam Plant Additions & Imp.	134,207	110,000	24,207	22%
1311	Ecrc-air-cems Replacement	174,325	200,000	(25,675)	-13%
1316	Ecrc-scholz Cmn-cems Analyzers	77,385	0	77,385	100%
1351	Scholz 1 Replace No 1 Feedwater Heater	1,444	0	1,444	100%
		<u>387,362</u>	<u>310,000</u>	<u>77,362</u>	<u>25%</u>
1400	Smith - Misc. Steam Plant Additions & Imp.	181,191	247,000	(65,809)	-27%
1405	Smith 1&2 Air Compressors	88,829	60,000	28,829	48%
1412	Envir-air-smith 1-low Nox-gnocis	1,141,202	1,200,000	(58,798)	-5%
1414	Smith Unit #2 Air Heater Basket Replacment	226,980	0	226,980	100%
1425	Envir-waste-smith 1-2 Ash Landfill Capping Cells 13-15	22,160	0	22,160	100%
1441	Ecrc-air-smith 1-cems Replacement	115,524	125,000	(9,476)	-8%
1453	Smith 2 Id Fan Control System	79,504	0	79,504	100%
1454	Ecrc-smith Cmn-cems Analyzers	68,987	0	68,987	100%
1478	Smith 2-retube Condenser	477,159	500,000	(22,841)	-5%
1479	Smith 2 Replace Condenser Water Boxe	658,873	900,000	(241,127)	-27%
1602	Smith Coal Handling Dozier Replacement	1,000,257	1,200,000	(199,743)	-17%
1606	Smith Plant-install Flow Meters On Water Wells	(3,201)	0	(3,201)	100%
1607	Smith-install Boiler Water Sample Station	218	0	218	100%
1610	Smith-replace Tanks At Demineralizer	(659)	0	(659)	100%
1620	Ecrc Smith 1&2 Conversion Of Shield Water Supply	47,905	53,000	(5,095)	-10%
		<u>4,104,930</u>	<u>4,285,000</u>	<u>(180,070)</u>	<u>-4%</u>
Daniel					
1500	Daniel-misc. Steam Plant Additions & Imp.	569,219	18,957	550,262	2903%
1509	Daniel 1 Air Preheater Sonic Blowers	203,752	206,339	(2,587)	-1%
1511	Daniel 2 Air Preheater Sonic Blowers	13,245	151,572	(138,327)	-91%
1514	Envir-air-daniel 2-upgrade Precipitator Internals	1,928,847	2,005,127	(76,280)	-4%
1520	Daniel-install Feedwater Heater	641	0	641	100%
1523	Daniel Water Treatment Plant	12,522	2,747	9,775	356%
1524	Daniel Lab Controls	109,200	86,154	23,046	27%
1525	Daniel 1 Misc Outage	0	39,354	(39,354)	-100%
1528	Daniel 2 Nozzle Block	162,672	166,159	(3,487)	-2%
1533	Daniel 1 Acoustical Leak Detectors	35,440	38,395	(2,955)	-8%
1534	Daniel 2 Acoustical Leak Detectors	33,315	38,395	(5,080)	-13%
1536	Daniel 2 Westinghouse Wdpf Controls System	1,051,326	1,479,099	(427,773)	-29%
1538	Daniel 2 Bottom Ash Hopper	0	34,940	(34,940)	-100%
1539	Daniel Common Warehouse Remodeling	20,791	348,000	(327,209)	-94%
1540	Daniel Common Degasifier For Demineralizer	0	70,000	(70,000)	-100%
1542	Daniel 2 Reheater Replacement	2,129,370	1,550,000	579,370	37%
		<u>6,270,340</u>	<u>6,235,238</u>	<u>35,102</u>	<u>1%</u>
Total Production Capital Excluding Scherer		199,910,034	200,942,724	(1,032,690)	-1%

Revised Interrogatory 18

CRIST	(1)	(2)	(3)	(4)
<u>1995 - 2000</u>	<u>Baseline</u>	<u>Planned Outage</u>	<u>Special Projects</u>	<u>Total</u>
1995	\$19,590,898	\$7,493,670	\$1,420,000	\$28,504,568
1996	20,011,934	6,218,549	473,157	26,703,640
1997	20,459,194	2,844,087	0	23,303,281
1998	20,995,773	2,488,129	950,000	24,433,902
1999	21,075,454	5,532,883	1,063,746	27,672,083
2000	20,253,064	6,602,464	200,000	27,055,528
<u>2001 YTD Sept.</u>	14,920,822	5,470,547	6,105	20,397,474
Project Actual 2001	21,689,066	6,821,000	952,879	29,462,945
Budget 2002	23,573,761	11,327,439	2,307,600	37,208,800
Budget 2003	24,341,784	7,276,791	1,735,600	33,354,175
<u>Test Year</u> \$	23,879,624 \$	6,315,296 \$	1,278,260 \$	31,473,180