

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

DOCKET NO 891345-EI

**REBUTTAL TESTIMONY
OF
M. T. O'SHEASY**

Gulf Power



**DOCUMENT NUMBER-DATE
04465 MAY 21 1990
FPSC-RECORDS/REPORTING**

1 GULF POWER COMPANY
2 Before the Florida Public Service Commission
3 Rebuttal Testimony of
4 Michael T. O'Sheasy
5 In Support of Rate Relief
6 Docket No. 891345-EI
7 Date of Filing May 21, 1990

8 Q. Mr. O'Sheasy, have you previously submitted testimony in
9 this proceeding?

10 A. Yes. I submitted prefiled direct testimony in this
11 proceeding in support of the filed rates for Gulf Power
12 Company.

13 Q. Have you reviewed the testimony and exhibits of the
14 witnesses intervening in this proceeding?

15 A. Yes.

16 Q. What is the purpose of this rebuttal testimony?

17 A. It is to address the following cost of service subjects
18 raised by the witnesses for the intervenors in this
19 proceeding:

- 20 (1) Customer/Demand Classification of
21 Distribution Accounts
- 22 (2) Proper Production Allocation for Gulf Power Company
- 23 (3) Equivalent Peaker (EP) and Refined Equivalent Peaker
24 (REP)
- 25 (4) Allocation of Lines Investment
- (5) Allocation of Plant Scherer

1 (6) Voltage Differentiated Rates

2 (7) Transformation Discounts.

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CUSTOMER/DEMAND CLASSIFICATION

5 Q. On Page 36 of Mr. Pollock's testimony, he states that he
6 believes that the Commission should examine the
7 customer-demand classification issue. Do you agree that a
8 more representative costing analysis would recognize more
9 customer related costs in distribution accounts?

10 A. Yes. As stated on page 21 of my prefiled testimony, our
11 position is that the Minimum Distribution System is
12 includable for ascertaining customer related cost. This
13 is logical from a cost causative perspective.

14

15 Q. Why do you believe that it is logical from a
16 cost-causative perspective?

17 A. There is a customer related portion of distribution
18 investment required to serve customers independent of
19 their anticipated demand and energy requirements. The
20 mere fact that they wish to become a customer of Gulf
21 Power forces a certain minimal amount of equipment to be
22 there available to serve. Distribution facilities,
23 including poles, conductors, and transformers, are
24 required regardless of the Company's expectations
25 regarding load. A part of the customer component is the

1 theoretical minimum distribution system that would be
2 required to serve customers. The NARUC Electric Cost
3 Allocation Manual not only recognizes a customer related
4 portion of distribution costs, but devotes an entire
5 chapter to a discussion of the separation of the customer
6 related portion from the demand related portion.

7

8 Q. What would you recommend in this issue in order to define
9 more accurately the cost to serve Gulf's customers?

10 A. I recommend that we adopt the customer/demand
11 classification factors that were recommended in Gulf's
12 1984 retail filing. In fact, I believe that a more
13 current analysis would still produce quite similar
14 results. These factors would be applied in the following
15 manner:

16

FERC

| 17 | <u>Account</u> | <u>Description</u> | <u>Customer %</u> | <u>Demand %</u> |
|----|----------------|------------------------|-------------------|-----------------|
| 18 | 364 | Poles | 46.1% | 53.9% |
| 19 | 365 | Overhead Conductors | 13.8% | 86.2% |
| 20 | 366 | Underground Conduits | 13.8% | 86.2% |
| 21 | 367 | Underground Conductors | 13.8% | 86.2% |
| 22 | 368 | Line Transformers | 34.2% | 65.8% |
| 23 | 369 | Services | 100.0% | 0% |
| 24 | 370 | Meters | 100.0% | 0% |

25

1 PROPER PRODUCTION ALLOCATION FOR GULF POWER COMPANY

2 Q. Mr. Pollock states in his testimony that a seasonal
3 peaking allocator would be more appropriate for Gulf than
4 the 12-MCP and 1/13 Energy which you utilized. Why did
5 you choose 12-MCP and 1/13 Energy?

6 A. It was the required methodology stated in FPSC's Final
7 Order from Gulf's last rate case. As stated in my
8 testimony, we felt that this method was appropriate
9 because the results of this technique did not diverge
10 dramatically from results of concepts which we believe
11 more appropriate. Also, it is the methodology upon which
12 current rates are based and has been so since 1981.
13 Gulf's customers are therefore familiar with the price
14 signal which it sends. Since the majority of this
15 allocator is 12-MCP, it matches up nicely with the FERC's
16 preference for 12-MCP and the fact that Gulf's IIC
17 payments and credits are dependent upon its monthly peak.
18 Finally, it recognizes the impact of scheduled maintenance
19 performed in non-peak months.

20

21 Q. Is Mr. Pollock's "Near Peak" procedure appropriate for
22 Gulf Power Company?

23 A. No, although Gulf's costs are sensitive to the seasons.
24 His methodology is much too restrictive an interpretation
25 for Gulf's load shape, as even his results show. Mr.

1 Pollock's 71-hour allocation contains specified hours
2 found in only two summer months. Certainly there are
3 other months of the year when Gulf is in a "peaking mode."
4 Mr. Pollock's own Schedules 5 and 7 indicate that
5 throughout the years 1984 through 1989 there are at least
6 four to five different critical summertime months. In
7 addition, Mr. Haskins' Exhibit No. 6 further supports the
8 importance to Gulf of four summer months during 1987 and
9 1988.

10

11 Q. What is your opinion on Mr. Pollock's statement "besides
12 failing to adequately recognize the seasonal load
13 characteristics of the Gulf Power and Southern Company
14 systems and the fact that Southern schedules most of its
15 outages during the non-summer period, the 12CP method is
16 relatively insensitive to seasonal load shifts. As a
17 result, the 12CP method could send the wrong price
18 signal?"

19 A. His point that the 12CP method is relatively insensitive
20 to seasonal load shifts is true, but many allocation
21 methods would appear "relatively insensitive to seasonal
22 load shifts" when compared with the ultra-sensitive "Near
23 Peak" method whereby any load shifts from two specific
24 summer months to any of ten other months would result in
25 complete disappearance of any cost responsibility.

- 1 Q. Do you agree with Mr. Pollock's statement that the
2 "Near-Peak" method would produce more stable results over
3 time than would the other summer CP methods?
- 4 A. This could possibly be true when compared to strictly
5 "summer" coincident peak methods. Mr. Pollock has not
6 produced any data that shows it to be more stable than
7 12-MCP, however. In fact, many proponents of 12-MCP
8 applaud the fact that for most major rates, the 12-MCP
9 does indeed produce relatively stable results over time.
10 Also, one must remember that while stable results are
11 important, also very important is the assignment of cost
12 to those customers who caused the cost to be incurred. To
13 avoid associating cost responsibility to customers who may
14 have demanded service from Gulf during any one of ten
15 months other than July and August would be inequitable and
16 incorrect.
- 17
- 18 Q. What is your opinion on Mr. Pollock's stated basis for
19 using 5 percent as the threshold since, "this is the
20 period when system reliability is usually the most
21 critical"?
- 22 A. First of all, I question why the 5 percent figure was
23 chosen. What is the magic of 5 percent that justifies it
24 to define this specific time frame as most critical?
25 Secondly, the highest 71 hours are contained in July and

1 August, but Schedule 7 reveals four out of six years where
2 some other monthly reserve margins after planned/scheduled
3 maintenance were at or below the reserve margins for July
4 and August.

5

6 Q. Of the demand allocation methodologies proposed for
7 allocating generation cost in this case, which do you
8 recommend?

9 A. I recommend an allocator approximating the 12-MCP. The
10 purpose of a cost of service study is to allocate
11 "embedded" cost upon those factors that caused them to be
12 incurred, and, under these conditions, determine the cost
13 to serve. In order to do so, we must consider why these
14 costs were incurred. We must recognize that a generating
15 plant will service Gulf Power Company's customers over 30
16 years into the future.

17 This study is not a marginal cost study. It is not a
18 customer specific cost study. It is an analysis based
19 upon the "embedded" cost as defined by our industry and
20 allocated upon the causation of each of those costs. The
21 result is an average embedded cost study reflecting the
22 cost responsibility of an average customer within the
23 respective rate.

24 After this task has been completed, the rate designer
25 can be handed the inputs upon which he can fulfill his

1 responsibility. He will then take the average embedded
2 cost to serve the average customer within a rate class and
3 mold a price for specific customer groups which will
4 appropriately reflect cost and satisfy other goals and
5 objectives, while working within prevailing constraints
6 for the time frame to which these rates will apply. For
7 instance, the price signal which the rate artist provides
8 Gulf's customers must consider that we want to minimize
9 the cost to serve Gulf's customers over all future years.
10 This goal could then justify rates that will alter Gulf's
11 load shape, thereby producing a more efficient process.

12 The point here is that the selection of a costing
13 methodology should be dependent upon cost causation and
14 should mirror the system in place to service Gulf's
15 customers. It should not be a methodology selected to
16 achieve goals or objectives conditioned by economic,
17 societal, political, regulatory, and other constraints --
18 this is the responsibility of the rate designer; in this
19 case, Gulf's witness Haskins.

20
21 EQUIVALENT PEAKER AND REFINED EQUIVALENT PEAKER

22 Q. With that in mind, what do you think about the Equivalent
23 Peaker concept and the Refined Equivalent Peaker concept?

24 A. Both Equivalent Peaker concepts contain serious flaws
25 which prevent them from justifying departure from the

1 tried and tested methodology proposed by Gulf in this rate
2 case. They depend upon the proposition that additional
3 production plant costs result from the utility's attempt
4 to minimize total cost after factoring in running cost.
5 They assume that serving peak loads only, with no
6 consideration for running cost, would warrant a peaking
7 type plant. Accordingly the difference in equivalent
8 peaking cost and total cost is related to running time and
9 should therefore be allocated upon KWH.

10 These concepts do embody considerations which must be
11 made when planning a system to serve projected load at a
12 minimum cost. There is no doubt that, if a projected load
13 shape revealed a need to build plant, one criteria for
14 alternative plant selection would be to minimize total
15 cost by considering capital cost, running cost, and
16 projected plant utilization. However, the ultimate
17 decision of what to build is far too complex to simplify
18 into a mere trade-off of operating cost versus fixed cost.
19 Gulf's witness Mr. Howell will elaborate on some of these
20 other considerations, but there is no doubt that
21 governmental regulations, legal and societal constraints,
22 availability of capital, plant location parameters
23 including fuel delivery problems, current plant mix and
24 the potential dangers of total commitment to one type of
25 fuel all play a role in the decision making process.

1 Q. What failings do you see in the Equivalent Peaker concept
2 in addition to the over simplification of the system
3 planning process that is discussed by Mr. Howell?

4 A. When the decision was being made, the costs of peaking
5 units versus base units were not necessarily the same
6 peaking versus base relationships which we observe today.
7 To discount embedded cost to constant dollars is an
8 attempt in the right direction, but may not reflect what
9 the original costs were. For example, one must determine
10 whether the discount rates are appropriate, or whether
11 something was added after initial construction which could
12 not have been anticipated, such as scrubbers. Also, the
13 differential in oil cost and coal cost has not always been
14 constant. In fact, oil fired plants were at one time the
15 least cost option.

16 If you do accept the breakeven analysis between a
17 peaker and a base unit, why allocate the incremental costs
18 upon 8,760 hours of energy? Only the hours up to the
19 breakeven point were important in the decision. Past the
20 breakeven point, no matter how far, the decision has been
21 made and would not be altered no matter how the plant
22 utilization improved. To allocate these incremental
23 capital costs upon all hours would not track cost
24 causation.

25

1 The costs of reserving a peaker (i.e., its
2 reliability) may not be the same as those of a base unit.
3 The presumptions of EP, REP, and 12-MCP and 1/13 are that
4 reserve costs are identical. However, because EP and REP
5 differentiate the cost of peakers and base units for
6 allocation purposes, unlike 12-MCP and 1/13, this fact
7 requires a review of this reserving question.

8

9 Q. What do you feel about the statement that there may well
10 be a long run marginal generating plant cost of off-peak
11 energy use in which the EP method "will embody an
12 appropriate reflection"?

13 A. First of all, we are not allocating long run marginal cost
14 -- we are allocating average embedded cost. Secondly, if
15 there is some long term marginal generating cost of
16 off-peak energy use, I do not see where EP quantifies this
17 cost, and therefore, reflects it. It simply appears to
18 make a contribution towards it, which may be over or under
19 the true cost. Also, what if the utility has no long run
20 marginal generating cost of off-peak energy use? No one
21 has said or proven that there is long run marginal
22 generating cost of off-peak energy use for Gulf Power
23 Company. In this instance, costs would be allocated to
24 hours where none actually existed.

25

1 In addition, we would be indicating to our customers
2 that off-peak KWH growth is bad since we would be
3 allocating fixed cost on a KWH basis whereas we did not
4 under Gulf's present and proposed methodology.
5 Correspondingly, we would be telling our customers that
6 peaking growth is not nearly as bad as we once thought
7 since those costs would now be transferred to some degree
8 from peaking periods to off-peak periods. Over time, our
9 customers will react accordingly. System load factors
10 could easily deteriorate, creating a need for more C.T.'s
11 and fewer base load units in Florida. This may or may not
12 be the trend which is in the best interest of Gulf's
13 customers.

14

15 Q. Are there also flaws in the Refined Equivalent Peaker
16 concept?

17 A. Yes. This approach attempts to correct a major criticism
18 of the Equivalent Peaker method by only allocating the
19 incremental plant cost upon energy up to the breakeven
20 point between a peaker and a base unit. This, in theory,
21 is a logical enhancement. However, this in itself
22 presents a major problem:

23 How do you determine the breakeven point?

24 The methodology used by Mr. William Slusser, Jr. of
25 Florida Power Corporation in Docket No. 870220-EI and my

1 submitted response to Interrogatory No. 2 of Staff's First
2 Set of Interrogatories in this docket, discounts embedded
3 net plant costs of coal units and C.T.'s to current costs
4 in order to match up with today's current running cost;
5 the breakeven point then falls out. Besides the question
6 of selecting the appropriate discount rate, the volatility
7 of fuel (running) cost creates a problem. It has been
8 said that in the long run, coal cost may track oil cost.
9 However, it is most difficult to determine the correct
10 cost to enter when examining the current cost environment.
11 Many of the workpapers supporting the Company's response
12 to Interrogatory No. 2 were completed in November of 1988
13 based on then prevailing oil and coal prices. Consider
14 the impact that the Valdez oil spill has caused on oil
15 prices; this effect may be temporary, but also there may
16 be some lasting influence much like the '73 Arab Oil
17 Embargo.

18 The point to be made here is that the need to choose
19 a proper discount rate as well as volatility of fuel
20 prices will cause the breakeven point to jump around
21 dramatically. I have seen the hours of breakeven jump
22 from 900 hours in some studies to 3000 hours in others.
23 The impact on the hours selected and resultant allocator
24 may cause significant swings in implied cost

25

1 responsibility. The end result may be an unstable rate
2 design process requiring continuous rate adjustments.

3 The EP approach bases its energy/demand split upon
4 levelized gross investment. The Refined EP method bases
5 its energy/demand split upon levelized net plant. One
6 results in a 45 percent demand portion while the other
7 produces a 40 percent demand. It is not perfectly clear
8 which figure is correct.

9 The logic underpinning the Refined EP may assume an
10 optimization based upon certain planning parameters.
11 Because of the lumpiness of plant additions, it is rare
12 that any utility will always maintain an optimal mix for
13 the current load shape. As Mr. Howell states in his
14 testimony, "the philosophy of optimum generation mix did
15 not become widespread until the 70's," when most of Gulf's
16 current generation had been either constructed or
17 committed.

18 Does it then make sense to allocate actual embedded
19 dollars upon a few theoretically presumed optimal
20 parameters?

21 By levelizing embedded capacity cost into today's
22 constant dollars to synchronize with current running cost,
23 we are attempting to replicate the parameters which the
24 planner faced. However, the current day fixed
25 cost/variable cost relationship for peakers versus base

1 units is not necessarily the same factors which the system
2 planner observed when he constructed Plant Daniel in the
3 late 70's or Plant Smith in the mid 60's. The reason that
4 we rolled forward the capacity cost to match up with
5 current fuel cost is that we are not sure of the exact
6 fuel considerations anticipated at the time of
7 construction, nor are we certain that these costs are
8 relevant because of the dramatic changes in oil prices
9 since then. Therefore, we chose current day costs as a
10 proxy, but they are only a proxy at best. As a result, we
11 are allocating embedded dollars on a current cost
12 calculation which may or may not be appropriate.

13 Is there an inherent inconsistency in logic if one
14 assumes capital substitution theory in determining base
15 rates but average running cost allocation in fuel
16 recovery? Capital Substitution theory appears to suggest
17 that, after considering the running cost of a peaker
18 versus a base unit and the resultant breakeven point has
19 been passed, a base unit will be chosen and operated: in
20 other words, subsequent hours after the justification
21 point will have load requirements satisfied through the
22 running cost of base units. It seems inconsistent then to
23 associate any peaker fuel cost to hours past the breakeven
24 point; unfortunately, the average fuel clause methodology
25 would do so. Therefore, it does seem as if some type of

1 adjustment is appropriate. However, is is not clear
2 exactly what type of adjustment would be fair and
3 equitable, especially since Gulf is essentially all coal
4 fired. It does appear, however, that EP requires more of
5 an adjustment than REP merely because EP allocates fuel
6 savings capital cost to hours in the off-peak that should
7 not receive any.

8 The basis upon which the demand defined portion of
9 REP (and EP) is allocated must be examined carefully. In
10 response to Interrogatories No. 1 and No. 2 of Staff's
11 First Set in this docket, it was done upon the 12-MCP's.
12 However, some of these 12-MCP's fall outside the highest
13 1430 hours. It seems illogical then to allocate cost
14 defined to be serving demand requirements only, upon hours
15 not even necessary to justify the incremental "fuel
16 savings" investment cost. However, the real answer might
17 be to capture the highest 1430 hours from a reliability
18 standpoint, such as LOLP or EUE, which might possibly
19 contain all of the 12-MCP's.

20 In which component of rates do you place the incremental
21 cost allocated upon hours up to the breakeven point?

22 It seems as if it should be the energy component.
23 The analyst must still decide whether to place these costs
24 in the annual energy rate or in a seasonal rate.

25

1 Q. Could you summarize your position on generation cost
2 allocation?

3 A. Gulf's generation costs occur throughout the year. There
4 are four methodologies presented in this case: 12-MCP and
5 1/13, Near Peak, Equivalent Peaker, and Refined Equivalent
6 Peaker. Of these choices, the method which is most
7 appropriate for Gulf, considering Gulf's load shape and
8 other considerations previously mentioned, is definitely
9 12-MCP and 1/13. This method is the most sound and will
10 continue to provide the stable, consistent price signals
11 to which Gulf's customers are accustomed and which they
12 expect to see. The 12-MCP methodology is a widely used
13 and accepted methodology throughout our industry. The
14 other methods are either inappropriate (Near Peak) or
15 possess far too many flaws to warrant a departure from the
16 current methodology.

17
18 Q. If a choice had to be made between Equivalent Peaker and
19 Refined Equivalent Peaker, which alternative should be
20 chosen?

21 A. Before answering this, let me point out a few
22 implementation problems. First, both of these concepts
23 are relatively new. As a result their stability and
24 acceptability is still suspect. Obviously in order to
25 become accepted, any new concept must be subjected to

1 careful analysis and review. However, this is not the
2 time to test a new cost-of-service methodology on Gulf's
3 customers, given the other major issues in this case.

4 In fact, even if one of these procedures were
5 required, some type of adjustment period would only be
6 fair to Gulf's customers. Gulf's customers have been told
7 through price signals for over 50 years that they should
8 flatten their load shape, increase KWH usage in off-peak
9 times and reduce peak KW. Either of these two techniques,
10 especially the Equivalent Peaker method, would tell Gulf'
11 customers that KWH growth is bad and there will be more
12 allocation of cost as a result, while KW growth isn't so
13 bad after all. Even if this is justifiable due to an
14 evolution in our dynamic utility system and the costing
15 models that attempt to track it, our customers cannot be
16 expected to adapt overnight. They, over the years, have
17 purchased equipment to match the price signals we have
18 sent them. They would be sorely shocked by an immediate
19 adoption of Equivalent Peaker.

20 However, if one had to choose between EP versus
21 Refined EP, the best or least undesirable alternative
22 would be Refined EP. It presents fewer flaws than the EP.
23 However, the filed REP study should be re-examined to
24 determine the correct demand allocator for the equivalent

25

1 peaking cost and the question of a possible fuel cost
2 adjustment should be researched.

3

4

ALLOCATION OF INVESTMENT IN LINES

5 Q. On page 32 of Public Counsel's witness Scheffel Wright's
6 testimony, he states "the company should estimate the rate
7 base value of primary and higher voltage-level conductor
8 that functions as dedicated distribution facilities, or as
9 a higher voltage service drop, and directly assign these
10 estimated amounts to the classes that include the
11 customers who are served by these facilities." Do you
12 agree?

13 A. No. To examine this question more clearly, we must
14 visualize Gulf's electrical delivery system whereby there
15 is a network of interconnecting lines transmitting
16 electricity around the system at predetermined, reliable
17 voltage levels. From this network, taps branch off to
18 serve load centers. As a result, all related customers
19 are allocated an average portion of the network and taps
20 according to the loads they place on the system.

21 Account 369-Services contains secondary service drops
22 which must be installed to serve a customer at a secondary
23 distribution no matter what his load requirements. It is,
24 therefore, allocated upon number of customers. Line
25 investment cost found within other FERC accounts is sized

1 according to anticipated load requirements and, therefore,
2 allocated upon demand. Gulf has never assigned line
3 investment cost to specific customers. Some of the
4 primary reasons are:

- 5 1. It would be very difficult to determine the line
6 investment specifically serving one particular
7 customer. Some very large customers might prove
8 traceable but, if one accepted this methodology for a
9 few large customers, it would only be equitable to do
10 so for smaller customers. These smaller customers
11 would be most onerous to trace.
- 12 2. If one did assign so called "dedicated taps," one
13 would have to first determine the total investment in
14 taps, segregate it from investment in networks and
15 then remove dedicated ones leaving "common taps."
16 The common taps would then be allocated to common
17 customers only. To do otherwise would risk
18 associating taps with these dedicated customers
19 twice, once through the assignment process and
20 second, through the allocation process.
- 21 3. A further delineation of load flow would prove
22 necessary. The load from customers served by common
23 taps would be placed into a demand allocator for the
24 cost of common taps. Then, the load for these common
25 customers must be combined with the load from

- 1 customers using dedicated taps in order to produce an
2 allocator for the common network.
- 3 4. A tap serving one customer today may serve two or
4 more customers tomorrow. Gulf does not generally
5 incur large investments in lines designed to
6 specifically serve one customer over the entire life
7 of the line. What originally began as a line serving
8 one customer may have new customers added to the
9 line. Also, the line may become a closed loop which
10 would serve many more customers. Given these
11 possibilities, an annual review of dedicated taps
12 would be required.
- 13 5. Where does the dedicated tap begin? Can this
14 beginning point change as customers are added?
- 15 6. Not only would the accounting and load flows
16 segregation be most difficult, but the cost of
17 service model could require extensive revisions.
- 18 7. All the required effort would result in insignificant
19 effects on the cost-of-service results. It is
20 estimated that only 2 percent to 4 percent of lines
21 investment would prove to be dedicated at a
22 particular point in time. Due to the difficulty of
23 ascertaining the specific cost of these facilities
24 and the required annual updates, it is not certain
25 that the results of the cost of service study would

1 be any more accurate at any decimal level even if one
2 could perform this most difficult task. Mr. Howell
3 discusses the system planning aspects of direct
4 assignment of taps and gives a real example of why
5 Mr. Wright's concept of dedicated taps is not
6 appropriate for a utility such as Gulf.

7

8

ALLOCATION OF PLANT SCHERER

9 Q. Do you agree with Dr. Johnson's statement that Plant
10 Scherer should be considered a surcharge?

11 A. No. I do not. Plant Scherer is definitely considered a
12 production resource during the 1990 test period for the
13 reasons fully explained by Messers. Parsons, Scarbrough,
14 and Howell. As such, its allocation on a production
15 allocator is entirely appropriate.

16

17 Q. If it were to be considered a surcharge, should it be
18 allocated upon revenues?

19 A. No. It should not. If it were deemed appropriate to
20 consider it as a surcharge, the basic reason that it would
21 be so placed is that it would become used and useful as
22 generating resource in the future. When it then did
23 become an acknowledged production resource in the future,
24 surely it would receive a production type of allocation.

25

1 Although it is not entirely clear, I presume
2 Dr. Johnson is advocating the isolation of Plant Scherer's
3 cost and the allocation of this cost in the cost of
4 service study upon revenues. A revenue allocation,
5 however, is actually an indirect allocation result of the
6 cost of all services which have been allocated upon the
7 direct allocators of KWH, KW, and number of customers.
8 This revenue allocation result involves all functions of
9 the utility: Production, Transmission, Distribution,
10 Customer Accounting, and Customer Assistance. Plant
11 Scherer is a production plant and to utilize an allocator
12 also influenced by transmission, distribution, customer
13 accounting, and customer assistance is illogical and
14 certainly not cost based.

15 In addition, a cost-benefit inequity would result.
16 If Plant Scherer were allocated in its early, more
17 expensive years upon revenues, and during its cheaper,
18 depreciated years upon a production allocator when its
19 resource benefits were being enjoyed, we would have
20 customers who were strongly affected by transmission,
21 distribution, customer accounting, and customer
22 assistance, paying for Plant Scherer but failing to enjoy
23 commensurate benefits of the cheaper resource cost when it
24 was deemed used and useful due to the same customers'
25 smaller sensitivity to pure production allocation. To

1 create this cost-benefit inequity would be incongruous and
2 senseless. Plant Scherer is a production plant today,
3 tomorrow, and until it is retired.

4

5

VOLTAGE DIFFERENTIATED RATES

6 Q. What is your opinion on voltage differentiated rates?

7 A. I do not disagree with the theoretical concept of voltage
8 differentiated rates. In fact, Gulf currently has voltage
9 differentiated rates and is proposing a cost based
10 transformation discount in this docket.

11 Q. Do you concur with Dr. Johnson's voltage differentiated
12 rates?

13 A. I do believe that if possible they should be cost based.
14 Unfortunately, Dr. Johnson's procedure is not cost based
15 in terms of unit cost. It would produce a discount, but
16 that discount could be above or below what the true cost
17 based discount should be.

18

19 Q. Can you elaborate further on this distinction between Dr.
20 Johnson's procedure and a pure unit cost method?

21 A. His procedure appears to depend upon a factor which
22 contains two ingredients: (1) The numerator represents
23 his cost of serving the customers as they exist in the
24 rate class from the uppermost voltage level down through
25 the voltage level in question, and (2) the denominator

1 reflects the total cost to serve all customers as they
2 exist in the rate class, or as he terms it on his direct
3 testimony, page 18, line 13, the average cost of LP/LPT
4 service. So, in effect what we are dealing with is the
5 cost of serving various loads at different voltage levels
6 which is somewhat different from the cost of serving the
7 same load at two different service levels. In order to
8 base a discount on pure unit cost, one needs to determine
9 the cost to serve a KW at level 5 and the cost to serve
10 that same KW at level 2. The difference can then be used
11 to accurately develop the discount.

12

13 Q. What is your recommendation?

14 A. If this Commission decides to implement voltage level
15 differentiated rates for LP/LPT, implementation should be
16 based upon a cumulative unit cost analysis which properly
17 considers the cost differentials involved in serving
18 separate voltage levels.

19

20 TRANSFORMATION DISCOUNTS

21 Q. Do you agree with Dr. Johnson that a transformation
22 discount is warranted?

23 A. There is nothing wrong with a transformation discount
24 where customers have purchased their own transformers.
25 However, if one is advocating voltage differentiated

1 rates, as he apparently is, one should not also give a
2 transformation discount. This would provide a credit
3 twice for the avoided transformation cost, since the
4 discount would already have been embedded in the
5 discounted voltage differentiated rates in this instance.
6

7 Q. Is there a discount developed in this rate proceeding that
8 reflects the cost to Gulf Power Company of transformation
9 equipment?

10 A. Yes. Gulf's responses to Interrogatories No. 110 and No.
11 111 of Staff's Eighth Set in this docket provide a
12 discount for transformation cost. These discounts by rate
13 class and by voltage level for customer owned
14 transformation are shown below:

| | <u>Primary</u> | <u>Transmission</u> |
|-------------|----------------|---------------------|
| 15 GSD/GSDT | \$0.35/KW | \$0.41/KW |
| 16 LP/LPT | \$0.42/KW | \$0.52/KW |
| 17 PX/PXT | N/A | \$0.11/KW |

18
19 In addition, in Interrogatory No. 113 of Staff's Eighth
20 Set the following discounts were developed for metering
21 voltage discounts to account for the reduction in line and
22 transformation losses as a result of the customer taking
23 service above the secondary distribution level. These
24 discounts by rate class and by voltage level for customer
25 owned transformation are shown below:

| | <u>GSD/GSDT & LP/LPT</u> | <u>Primary</u> | <u>Transmission</u> |
|---|------------------------------|----------------|---------------------|
| 1 | | | |
| 2 | Energy Discount | .82% | 1.8313% |
| 3 | Demand Discount | 1.26% | 2.632% |
| 4 | <u>PX/PXT</u> | | |
| 5 | Demand Discount | | 1.35531% |
| 6 | Energy Discount | | 1.00312% |

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Q. Does this conclude your rebuttal testimony?
A. Yes. It does.

