

GEORGIA POWER COMPANY
FPC DOCKET NO. ER76-587
PREPARED TESTIMONY OF ROBERT M. GROSS, JR.

1 Q PLEASE STATE YOUR NAME AND ADDRESS.

2

3 A My name is Robert M. Gross, Jr. My business address is 1000 Crescent
4 Avenue, N. E., Atlanta, Georgia 30309.

5

6 Q WHAT IS YOUR EDUCATIONAL BACKGROUND?

7

8 A I graduated from Georgia Institute of Technology in 1965, receiving
9 the degree of Bachelor of Industrial Engineering. I also attended
10 Georgia State University and in 1971 received the degree of Master
11 of Business Administration, majoring in finance.

12

13 Q PLEASE STATE YOUR PROFESSIONAL EXPERIENCE.

14

15 A I have been employed by Southern Engineering Company of Georgia for
16 approximately nine years. During this time I have been involved in
17 the preparation of cost of service studies of Class A and B investor-
18 owned utilities, rural electric cooperatives and municipal electric
19 systems and have participated in wholesale and retail electric rate
20 consulting assignments in 23 states. I am a registered professional
21 engineer in the State of Georgia.

22

23 Q HAVE YOU EVER TESTIFIED IN OTHER COMMISSION PROCEEDINGS?

24

25 A Yes, I have testified as a rate expert and cost of service witness
26 before the State Commissions of Kentucky, Indiana, Michigan, Vermont
27 and Virginia. I have also testified before the Federal Power
28 Commission in proceedings involving the Mississippi Power Company,
29 FPC Docket No. E-7685; Appalachian Power Company, FPC Docket No.
30 E-7775; Duke Power Company, FPC Docket No. E-7994; Gulf States
31 Utilities Company, FPC Docket No. E-8121; Gulf Power Company, FPC
32 Docket No. E-8911; Appalachian Power Company, FPC Docket No. E-9101;
33 Virginia Electric & Power Company, FPC Docket No. E-9147; Arizona
34 Public Service Company, FPC Docket No. E-8624; Public Service
35 Company of Indiana, Inc., FPC Docket Nos. ER76-149 and E-9537; and
36 Georgia Power Company, FPC Docket No. E-9091, and FPC Docket Nos.
37 E-9521 and E-9522.

38

39 Q BY WHOM IS SOUTHERN ENGINEERING COMPANY RETAINED IN THIS PROCEEDING?

40

41 A Southern Engineering Company is retained by Oglethorpe Electric
42 Membership Corporation (OEMC). Witnesses Springs, Ewert, Solomon,
43 Hill and I will be Oglethorpe Electric Membership Corporation's
44 witnesses in this proceeding.

45

46 Q WOULD YOU PLEASE SUMMARIZE THE TESTIMONY THAT WILL BE GIVEN BY OEMC'S
47 WITNESSES IN THIS PROCEEDING.

48

49 A Yes. Dr. Ewert provides testimony on the capital cost of Georgia
50 Power Company (GPC). Mr. Springs' testimony is primarily concerned

1 with the expense classification of Georgia Power Company's Southern
2 Company Pool transactions for the test period and the impact such
3 classifications have on the partial requirements rates. Mr. Hill
4 provides testimony concerning the Company's filed Partial Require-
5 ments Tariff Provision pertaining to Customer Contract Capacity.
6 Mr. Solomon is responsible for the allocation of expenses and invest-
7 ments to the categories of partial requirement service.
8

9 Q WHAT WAS YOUR ASSIGNMENT IN THIS PROCEEDING?

10

11 A My assignment was to determine whether the method employed by GPC for
12 Period II to develop the allocated cost of service with respect to
13 OEMC was proper. Secondly, I was to determine if the Company's pro-
14 cedures used to establish partial requirements rates by category were
15 just and reasonable.
16

17 Q WHAT DATA HAVE YOU REVIEWED IN PREPARING YOUR TESTIMONY AND RELATED
18 EXHIBITS?

19

20 A I have reviewed those portions of the Company's filing which relate
21 to its cost of service studies and subsequent partial requirements
22 rate design, including the testimony and exhibits of GPC's witnesses
23 and other information which GPC supplied in response to FPC Staff and
24 various Intervenor request for data.
25

26 Q WOULD YOU PLEASE SUMMARIZE OEMC'S POSITION WITH REGARD TO THE PARTIAL
27 REQUIREMENTS RATES AND BILLING TECHNIQUES FILED BY THE COMPANY IN THIS
28 PROCEEDING.
29

30 A The testimony that OEMC files in this proceeding is directed toward
31 errors and inconsistencies found in GPC's initial filing. Generally
32 OEMC has found that Georgia Power Company has significantly overstated
33 the cost of providing service to OEMC as a partial requirements cus-
34 tomer. This overstatement in costs has produced a revenue requirement
35 resulting in partial requirements rates which are clearly excessive.
36 In addition as pointed out in the testimony of Mr. Springs and Mr.
37 Hill, the Company's proposed tariff language pertaining to Contract
38 Capacity places an unreasonable burden on OEMC and is clearly inconsistent
39 with the allocated cost of service.
40

41 Q WOULD YOU BRIEFLY SUMMARIZE THE CONCLUSIONS WHICH YOU AND THE OTHER
42 WITNESSES FOR OEMC HAVE REACHED AS A RESULT OF STUDYING GPC'S COST
43 OF PROVIDING PARTIAL REQUIREMENT SERVICE AS SHOWN IN STATEMENT "M"
44 AND SUPPORTING EXHIBITS.
45

46 A The cost of service studies presented by the Company in this pro-
47 ceeding significantly overstate the cost of providing partial require-
48 ments service to OEMC. The following major errors have been made by
49 GPC in its Period II cost of service study necessitating adjustments:
50

- 1 1. As testified to by Mr. Solomon, GPC included in its rate
2 base excessive amounts for cash working capital.
- 3
- 4 2. As testified to by Mr. Solomon, GPC does not properly
5 allocate the administrative and general expenses to
6 functional categories.
- 7
- 8 3. As also testified to by Mr. Solomon, GPC improperly
9 allocated certain sales expense and related investment
10 to OEMC.
- 11
- 12 4. As testified to by Mr. Springs, GPC has incorrectly
13 classified certain test year purchased power expenses
14 (Account 555) associated with GPC's transactions with the
15 Southern Company Pool.
- 16
- 17 5. Finally, I have found that GPC has not correctly allocated
18 to OEMC the investment and expenses related to production
19 plant and stepup substation facilities for the test year.
- 20

21 Q I HAND YOU OEMC EXHIBIT NO. ____ (RMG-1) PAGES 1 THROUGH 4 AND ASK IF
22 THIS EXHIBIT WAS PREPARED UNDER YOUR SUPERVISION?

23

24 A Yes.

25

26 Q WOULD YOU PLEASE EXPLAIN THE PURPOSE OF PAGE 1 OF THIS EXHIBIT?

27

28 A Page 1 shows the changes to the Company's filed Statement "M" page 1
29 for Period II occasioned by the OEMC adjustments previously
30 referenced. As shown on line 2, income earned by the Company on partial
31 requirement sales to OEMC during Period II results in a 9.11% rate of
32 return under the present partial requirements rate "PR-1" and a 12.58%
33 rate of return under the proposed partial requirements rate "PR-2".

34

35 Q WHAT IS THE PURPOSE OF THE REMAINING THREE PAGES OF OEMC EXHIBIT NO. ____
36 (RMG-1)?

37

38 A The remaining three pages of this exhibit show the methods
39 that I have used to allocate GPC's rate base investment
40 and expenses, excluding fuel costs, related to partial requirement
41 service.

42

43 Q WOULD YOU PLEASE EXPLAIN THE METHODS USED TO ALLOCATE THESE COSTS AS
44 SHOWN ON PAGES 2 THROUGH 4 OF OEMC EXHIBIT NO. ____ (RMG-1).

45

46 A Yes. Page 4, line 1 of this Exhibit shows GPC's net rate base invest-
47 ment in production and stepup substation facilities separated into
48 base, intermediate, peaking and reserve categories. Likewise, capacity
49 related operating expenses associated with production and stepup sub-
50 station facilities are shown on line 8 separated into these same categories.

1 This separation was provided by Mr. Solomon as shown in OEMC Exhibit No.
2 _____(JBS-1) pages 2 and 6.
3

4 I have analyzed these rate base investments and operating expenses
5 by category to determine the amounts from each category that are
6 assignable to other categories for reserve purposes. This reserve
7 assignment follows the partial requirements billing procedure used
8 by the Georgia Power Company to establish reserve cost by category
9 in compliance with the Partial Requirements Service Tariff Original
10 Sheet No. 7 "Determination Of The Capacity Reserves" as filed in
11 Docket E-9521. The result of the calculations contained on page 4
12 show that of the total net rate base investment in production and
13 stepup substation facilities of \$1,582,728,420, \$931,956,741 is
14 related to a base load function, \$426,554,319 is related to an inter-
15 mediate load function and \$224,317,360 is necessary to meet peaking
16 requirements.
17

18 Likewise, of the total system, capacity related operating
19 expenses associated with production and stepup substation facilities
20 of \$152,153,707, \$88,747,827 is required to service base loads,
21 \$45,245,096 is required for intermediate loads, and \$18,161,584 is
22 associated with the peaking load category.
23

24 Q WHAT IS THE PURPOSE OF PAGE 3 OF THIS EXHIBIT?
25

26 A Page 3 shows the method used to allocate to OEMC production related
27 rate base and expenses. Rate base investment and capacity related
28 operating expenses associated with production and stepup substation
29 facilities are allocated by category, based on category capacity
30 allocation factors applicable to OEMC taken from page 2. I have
31 used the same overall loads to develop these allocation factors as
32 used by the Georgia Power Company in their cost allocations contained
33 in Statement "M".
34

35 Production energy related expenses (non-fuel) are allocated to OEMC
36 on the basis of OEMC's megawatt hour purchases projected for the test
37 year as a percent of total system megawatt sales at the B-1 level.
38

39 Q WOULD YOU PLEASE SUMMARIZE OEMC'S ADJUSTMENTS TO GEORGIA POWER
40 COMPANY'S FILED STATEMENT "M" FOR PERIOD II.
41

42 A After incorporating the adjustments to system expenses and investments
43 as covered in the testimony of Mr. Springs and Mr. Solomon, I have
44 prepared a cost allocation for partial requirements service to OEMC
45 reflecting specifically the amounts of base, intermediate, peaking
46 and reserve purchases by OEMC during the test year using loads
47 estimated by the Georgia Power Company. This method differs from
48 the cost allocation method used by the Georgia Power Company. The
49 Company allocated all production capacity related costs lump sum;
50 whereas I separated such production costs by category and then

1 allocated the cost associated with each category separately.
2
3

4 Q WHY IS IT NECESSARY TO ALLOCATE PRODUCTION AND STEPUP SUBSTATION
5 COST SEPARATELY BY CATEGORY?
6

7 A The Georgia Power Company's proposed partial requirements rates
8 reflect category pricing. In order to properly measure the adequacy
9 of revenues produced by these partial requirements rates as applied
10 to OEMC loads, a more precise method of production and stepup substa-
11 tion cost allocation must be used to determine the allocated cost of
12 service. I believe that this more detailed cost allocation procedure
13 results in a more accurate measure of the Georgia Power Company's cost
14 of providing partial requirements service to OEMC.
15

16 Q I HAND YOU OEMC EXHIBIT NO. ____ (RMG-2) PAGES 1 AND 2 AND ASK IF THIS
17 EXHIBIT WAS PREPARED UNDER YOUR SUPERVISION?
18

19 A Yes.
20

21 Q WOULD YOU PLEASE DESCRIBE BOTH PAGES OF THIS EXHIBIT?
22

23 A Yes. This exhibit reflects the changes that I believe are necessary
24 to the Company's filed statement "P". The purpose of statement "P"
25 is to show the development the rate pricing, in this case partial
26 requirements rate pricing.
27

28 Page 1 of OEMC Exhibit No. ____ (RMG-2) shows the determination of the
29 partial requirement capacity charges by category. I have made certain
30 adjustments to the Company's filed statement "P" to reflect the following:
31

- 32 1. The change in the peak hour capability by category as shown on
33 OEMC Exhibit No. ____ (RMG-3) page 1.
34
- 35 2. The revised net rate base investment in production and stepup
36 substation facilities as shown on OEMC Exhibit No. ____ (JBS-1).
37
- 38 3. The revised capacity related operating expenses as shown on
39 OEMC Exhibit No. ____ (JBS-1).
40
- 41 4. The change from the Company's requested rate of return of
42 11.01% to Dr. Ewerts' recommended rate of return of 9.29%.
43

44 Q WOULD YOU PLEASE EXPLAIN THE PURPOSE OF PAGE 2 OF OEMC EXHIBIT NO.
45 ____ (RMG-2)?
46

47 A Yes. Mr. Solomon on OEMC Exhibit No. ____ (JBS-1) separated production
48 related expenses of the Company in to capacity related expenses, energy
49 related expenses (non-fuel) and fuel expense. The Company's proposed
50 PR-2 capacity charges contain capacity costs as well as non-fuel energy

1 related costs. Since there is a significant amount of operating expense
2 that is a function of kilowatt hour output rather than peak hour demand,
3 I believe that these costs can be recovered in more equitable fashion
4 from partial requirements customers housed in an energy charge rather
5 than in the capacity charge. For that reason I am proposing that the
6 partial requirements pricing reflect not only capacity charges but also
7 a flat charge per kilowatt hour to recover non-fuel energy related
8 expenses. As shown on page 2, a charge of 0.46 mills per kilowatt hour
9 on each kilowatt hour of partial requirements sales is required to
10 achieve this pricing concept.

11
12 Q I HAND YOU OEMC EXHIBIT NO. ___ (RMG-3) CONSISTING OF SIX PAGES AND
13 ASK IF THIS EXHIBIT WAS PREPARED UNDER YOUR SUPERVISION?

14
15 A Yes. This exhibit calculates OEMC's monthly capacity payments for
16 partial requirements services for the test year using the OEMC proposed
17 unreserved category capacity charges from revised Statement "P".

18
19 Q HAVE YOU USED THE SAME GENERAL PROCEDURE THAT THE GEORGIA POWER COMPANY
20 USED TO DETERMINE OEMC CAPACITY CHARGES FOR THE TEST YEAR UNDER THE
21 PARTIAL REQUIREMENTS RATE CONCEPT.

22
23 A Yes, I have used generally the same procedure, but with certain minor
24 adjustments required to be consistent with previous testimony.

25
26 Q WOULD YOU PLEASE EXPLAIN EACH PAGE OF OEMC EXHIBIT NO. ___ (RMG-3)
27 EMPHASIZING THOSE AREAS OF THE PROCEDURE WHERE ADJUSTMENTS WERE MADE.

28
29 A Page 1 shows the Integrated System Resource Classification List for
30 partial requirements billing purposes. The stacking of Georgia Power
31 Company's units by category is precisely the same unit stacking filed by
32 the Company in this proceeding. The following adjustments, however
33 have been made to reflect a more accurate representation of Georgia
34 Power Company's actual capability to service its territorial load
35 throughout the year.

- 36
37 1. Plant Wansley's capability is reduced to 435,000 kilowatts
38 of rated capability to properly weight the capability of this
39 unit with the six months of operations reflected in the test
40 year cost of service.
41
42 2. Georgia Power Company kW transactions relating to Southern Company
43 Pool Surplus Capacity Peak Period Sales and Peak Hour Purchases are
44 appropriately subtracted from or added to the stacking in
45 accordance with Mr. Springs testimony.

46
47 These adjustments result in a revised total territorial capability of
48 11,174,055 kilowatts.

49
50 On page 2 of this exhibit, the reserves of the Georgia Power Company

1 for Period II are shown to be 18.25%
2
3 Pages 3 and 4 of this exhibit carry forward the 18.25% system reserve
4 amount in calculating the reserved partial requirement capacity charges
5 necessary to recover the partial requirement test year revenue require-
6 ment attributable to OEMC.
7
8 Finally, pages 5 and 6 show OEMC's monthly capacity charge for the
9 test year based upon the revised reserved partial requirement capacity
10 charges. With the exception of the OEMC revised rate charges all calcu-
11 lations are identical to those used by the Georgia Power Company in its
12 Initial Filing.
13
14 For the test year, capacity charges to OEMC based upon the OEMC revised
15 partial requirements capacity rates are \$46,660,806.
16
17 Q I HAND YOU OEMC EXHIBIT NO. _____ (RMG-4) AND ASK IF THIS EXHIBIT WAS
18 PREPARED UNDER YOUR SUPERVISION.
19
20 A Yes.
21
22 Q WOULD YOU PLEASE EXPLAIN THIS EXHIBIT?
23
24 A This exhibit summarized test year revenues produced by OEMC's proposed
25 partial requirements rates, excluding fuel cost recovery. As shown
26 these revenues produce a rate of return of 9.29% for Partial Require-
27 ments Service to OEMC for the test year.
28
29 Q YOU HAVE INDICATED THAT OEMC REVENUES AND ALLOCATED COSTS ON THIS
30 EXHIBIT ARE NET OF FUEL COST. WOULD YOU PLEASE EXPLAIN WHY FUEL COSTS
31 RELATION TO OEMC ARE NOT INCLUDED?
32
33 A The Company in its filing estimated that OEMC would be charged with
34 \$63,930,103 of Fuel Cost during the test year. Since the Company used
35 this amount in both OEMC revenues and allocated expenses, the result
36 was a wash on return.
37
38 Mr. Springs advocated a change in the manner by which OEMC is charged
39 monthly for Company incurred fuel expense. The \$63,930,103 previously
40 estimated by the Company will therefore change. Since data is not
41 available in adequate detail to estimate for the test year the change
42 in fuel cost assignment to OEMC under Mr. Springs' proposed procedure,
43 I have assumed, as did the Company, that specifically assigned fuel
44 cost will be equally reflected in test year revenues and allocated
45 costs, thus producing a wash on return.
46
47 Q DOES THAT CONCLUDE YOUR TESTIMONY?
48
49 A Yes.
50