

**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET NO. 080317-EI**

**IN RE: TAMPA ELECTRIC COMPANY'S  
PETITION FOR AN INCREASE IN BASE RATES  
AND MISCELLANEOUS SERVICE CHARGES**



**REBUTTAL TESTIMONY AND EXHIBIT  
OF  
WILLIAM R. ASHBURN**

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**TABLE OF CONTENTS**  
**REBUTTAL TESTIMONY AND EXHIBIT**  
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RETAIL CLASS COST OF SERVICE STUDY..... 4  
TREATMENT OF INTERRUPTIBLE SERVICE..... 21  
CLASS REVENUE ALLOCATION..... 30  
FIRM RATE DESIGN..... 32  
SUMMARY OF REBUTTAL TESTIMONY..... 34  
REBUTTAL EXHIBIT..... 37

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BEFORE THE PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY

OF

WILLIAM R. ASHBURN

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

**A.** My name is William R. Ashburn. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am the Director, Pricing and Financial Analysis for Tampa Electric Company ("Tampa Electric" or "company").

**Q.** Are you the same William R. Ashburn who filed direct testimony in this proceeding?

**A.** Yes I am.

**Q.** What is the purpose of your rebuttal testimony?

**A.** The purpose of my rebuttal testimony is to address certain errors and shortcomings in the prepared direct testimony of Mr. Jeffrey Pollock, testifying on behalf of the Florida Industrial Power User's Group ("FIPUG").

DOCUMENT NUMBER-DATE  
11649 DEC 17 8  
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1 Q. Have you prepared an exhibit supporting your rebuttal  
2 testimony?

3  
4 A. Yes, I am sponsoring Rebuttal Exhibit No. \_\_ (WRA-2),  
5 consisting of five documents, prepared by me or under my  
6 direction and supervision. These consist of:

7 Document No. 1 Average Monthly Load Factor, Average  
8 Monthly Coincidence Factor and Monthly  
9 Coincidence Factor vs. Monthly Load  
10 Factor Scattergrams for GSD, GSLD and IS

11 Document No. 2 Average Monthly Load Factor Scattergrams  
12 for GSD, GSLD and IS by Rate Schedule

13 Document No. 3 Revised Pollock Exhibit JP-7

14 Document No. 4 Discount Being Realized by General  
15 Service Interruptible Customers under the  
16 Company's Proposed Rates

17 Document No. 5 Comparison of IS Credit Rate Designs  
18

19 Q. Please summarize the key concerns and disagreements you  
20 have regarding Mr. Pollock's testimony addressing Tampa  
21 Electric's proposed retail cost of service study and rate  
22 design.

23  
24 A. My key concerns and disagreements with his testimony are  
25 as follows:

- 1 • Mr. Pollock's criticisms and recommended revisions to  
2 Tampa Electric's proposed retail cost of service study  
3 are not substantiated and should be rejected.  
4
- 5 • His recommendations on how to cost support and price  
6 interruptible service are regressive, provides too  
7 generous a benefit for such service and attempts to  
8 lock in this overgenerous benefit to the detriment of  
9 all other customers until Tampa Electric's next base  
10 rate change.  
11
- 12 • Mr. Pollock's revised class revenue allocation is based  
13 on his inappropriate revised retail class cost of  
14 service study, and should be rejected.  
15
- 16 • His recommendation to move all energy and demand rates  
17 completely to unit cost is drastic and the Commission  
18 should not adopt it as a policy.  
19
- 20 • His criticism of Tampa Electric's calculation of  
21 transformer ownership discounts is incorrect.  
22
- 23 • Mr. Pollock's criticism of the method of measuring and  
24 applying the interruptible credit is unfounded and  
25 should be rejected.

1 **RETAIL CLASS COST OF SERVICE STUDY**

2 **Q.** What are Mr. Pollock's criticisms with regard to Tampa  
3 Electric's proposed retail class cost of service study?

4  
5 **A.** Mr. Pollock disagreed with three elements of the  
6 company's proposed study: 1) consolidating the GSD, GSLD  
7 and IS classes, 2) classifying the Big Bend scrubber and  
8 Polk Unit 1 gasifier investments to energy rather than  
9 demand, and 3) utilizing the 12 Coincident Peak and 25  
10 Percent Average Demand ("12CP and 25% AD") method for  
11 allocating production plant.

12  
13 **Q.** What reason does Mr. Pollock give for his disagreement  
14 with Tampa Electric's proposed consolidation of the GSD,  
15 GSLD and IS classes?

16  
17 **A.** Mr. Pollock claims Tampa Electric failed to show that  
18 there are no significant differences in either service  
19 characteristics or usage patterns of these classes.

20  
21 **Q.** Did the company consider differences in service  
22 characteristics in its proposed consolidation?

23  
24 **A.** Yes, absolutely. First, the differences in service  
25 characteristics within the three current classes are not

1 significant enough that they cannot be combined as  
2 proposed. Each of the service characteristics are  
3 appropriately considered in the various applicable tariff  
4 provisions proposed for the new consolidated GSD rate  
5 schedule. Second, the company has addressed the  
6 differences in service characteristics of customers in  
7 these three classes by including special rate features in  
8 the proposed consolidated GSD rate schedule.  
9 Specifically:

10 • **Metering cost differences** are addressed through  
11 proposed customer charges which have been tiered by  
12 metering voltage to recognize service level  
13 differences;

14  
15 • **Service voltage cost differences** are addressed by the  
16 design of proposed charges for service at secondary  
17 distribution, the lowest voltage level, and providing  
18 transformer ownership discounts when service is taken  
19 at higher voltage levels;

20  
21 • **Billing determinant differences** due to losses between  
22 voltage levels are reflected in the rate design by the  
23 application of metering level adjustments; and,

24  
25 • **Power factor differences** are addressed by including the



1 power factor clause in the proposed combined GSD rate  
2 schedule for customers whose demand is in excess of  
3 1,000 kW, as was previously included under the GSLD  
4 rate schedule.

5  
6 The proposed rate design for GSD, which includes the  
7 aforementioned features recognizing service level  
8 differences, accommodates all of these differences to  
9 permit the use of a single set of GSD rate schedules.

10  
11 **Q.** Please address Mr. Pollock's concern regarding usage  
12 pattern differences.

13  
14 **A.** On page 23 of his rebuttal testimony, Mr. Pollock  
15 presents the average characteristics of customers in  
16 various rate classes. However, as depicted in the  
17 scattergrams in Document No. 1 of my rebuttal exhibit,  
18 there are few customers in each of the existing rate  
19 classes that possess the exact average characteristics.  
20 In fact, the graphs show that there is a wide dispersion  
21 of coincident factors and load factors for all three of  
22 the rate classes, most particularly the IS class. Cost-  
23 based rates are developed using an average cost of  
24 service for each class. However, since only a subset of  
25 customers in any particular class possess average load

1 characteristics, only this same subset actually pays the  
2 "true" cost of service. Rather than focusing on multiple  
3 general service demand rate classes that are only cost-  
4 based for customers possessing the average  
5 characteristics in the class, it is more important to  
6 improve on a general service demand rate structure that  
7 better tracks cost recovery over a wide range of usage  
8 characteristics.

9  
10 For GSLD customers, the primary usage difference from GSD  
11 is the size of the customer's load or kW demand. Load  
12 size should not be the sole basis for establishing a  
13 separate rate schedule. By incorporating the previously  
14 described service features in the GSD rate schedule, the  
15 GSLD schedule is unnecessary and should be eliminated,  
16 and the customers should be combined into the new  
17 proposed GSD rate schedule.

18  
19 With respect to the current IS rate class, this group as  
20 a whole may currently portray some usage patterns that  
21 differ from the population of demand metered general  
22 service customers. However, as shown in Document No. 1  
23 of my rebuttal exhibit, the customers making up this  
24 group have a wide range of usage patterns similar to the  
25 usage patterns of present GSD and GSLD customers.

1 It is important to recognize that prior to being closed  
2 to new business, demand metered GSD or GSLD customers  
3 could elect to take service under the IS schedule.  
4 Certain phosphate customers did so during Tampa  
5 Electric's 1985 base rate proceeding in Docket No.  
6 850050-EI. The original purpose for the construct of  
7 this class had nothing to do with level of service or  
8 load characteristics; it was a means to segregate  
9 customers and provide a discount for customers agreeing  
10 to be interrupted.

11  
12 The interruptible credit, currently being provided  
13 through the GSLM-2 and GSLM-3 conservation programs,  
14 should be the only differentiation provided to  
15 interruptible service customers under their base rate  
16 design. The company's proposed consolidated GSD rate  
17 schedule, with the option to select interruptible service  
18 under the GSLM-2 and GSLM-3 riders, fulfills this  
19 objective.

20  
21 **Q.** On pages 23 and 24 of Mr. Pollock's testimony, he  
22 describes the significance of a customer's or a class'  
23 coincidence factor. Do you agree with Mr. Pollock that  
24 differences in coincidence factor are important to  
25 recognize in rate design?

1 **A.** Yes, very much so. A primary cost causation for power  
2 supply capacity costs (i.e., production and transmission  
3 capacity costs) is the monthly system peak load. Thus, a  
4 customer's contribution to the system peak is important  
5 to recognize for cost recovery. Mr. Pollock's table on  
6 the top of page 24 of his testimony demonstrates the  
7 inequity that results in a rate design where coincident  
8 factor is not recognized in rate design, and when these  
9 types of costs are recovered solely on the basis of a  
10 customer's billing demand. Under such a rate design and  
11 using his example, the \$30,000 total demand costs in his  
12 table would be recovered by the total of the three  
13 customers' billing demands (2,000 + 1,430 + 1,175 = 4,605  
14 kW), resulting in a rate of \$6.51 per kW of billing  
15 demand. This compares to a more reasonable cost  
16 responsibility, which recognizes the coincidence factors  
17 of \$5.00, \$6.99, and \$8.51 per kW for customers one, two  
18 and three, respectively.

19  
20 What Mr. Pollock ignores is that the same coincidence  
21 factor/cost relationship that is so important in  
22 equitably allocating costs to rate classes should and can  
23 also be recognized in the rate design for application to  
24 customers within a rate class. Intra-class rate equity  
25 can be achieved with a proper rate design such that it

1 would be unnecessary to establish additional general  
2 service rate classes simply to recognize groups of  
3 customers having different coincident factors within that  
4 rate class. In other words, instead of attempting to  
5 preserve a rate class consisting of a group of demand  
6 billed, general service customers who have elected  
7 interruptible service and who happen to have slightly  
8 different coincident factors than the entire population  
9 of demand-billed general service customers as a whole,  
10 Mr. Pollock could have focused on developing one general  
11 service demand rate structure that captures the  
12 coincident factor/cost relationship of customers over a  
13 wide range of usage characteristics like Tampa Electric  
14 has proposed. Document No. 2 of my rebuttal exhibit  
15 illustrates how customers served under the current GSD  
16 rate schedule are distributed into optional rates within  
17 the class that provide recognition of customers' usage  
18 characteristics. There is no justifiable reason why GSLD  
19 and IS customers must remain in separate classes just to  
20 recognize usage characteristics.

21  
22 **Q.** What is the basis of Mr. Pollock's disagreement with the  
23 classification of the Big Bend scrubber and Polk Unit 1  
24 gasifier investments to energy?  
25

1     **A.**   He addresses the two investments differently.    With  
2       respect to the Big Bend scrubber, he suggests that the  
3       investment is directly related to the associated power  
4       plant providing capacity to the system and thus should be  
5       classified to demand.    Further, he dismisses prior  
6       Commission-approved energy classification treatment from  
7       Tampa Electric's last rate proceeding as merely the  
8       result of a stipulation.   However, he fails to recognize  
9       that the Commission approved the subsequent Big Bend  
10      scrubber investment classification to energy for  
11      environmental cost recovery purposes.   Finally, he refers  
12      to Progress Energy Florida ("PEF") and Florida Power &  
13      Light's ("FPL") treatment of similar environmental  
14      investments as being classified to demand but he does not  
15      appear as concerned that both were results of  
16      stipulations.   Mr. Pollock suggests that the entire Polk  
17      power plant and all of its components including the  
18      gasifier are designed to convert fuel into energy and  
19      asserts that the gasifier should naturally be classified  
20      to demand.

21  
22     **Q.**   Mr. Pollock asserts that since the Big Bend scrubber and  
23       Polk Unit 1 gasifier are physically connected to the  
24       power plants, they are a part of the plants' function to  
25       serve load and maintain reliability and thus should be

1 classified on a demand basis. Is he correct?

2

3 **A.** No. While the scrubber is physically connected to the  
4 power plant, there is no engineering requirement that the  
5 scrubber must operate for the unit to operate. In fact  
6 three of the Big Bend units were built and operated  
7 without scrubbers for many years and the fourth unit,  
8 while built with a scrubber, often operated without the  
9 scrubber. The scrubber captures unwanted emissions from  
10 the plant and does not serve load or help maintain  
11 reliability.

12

13 The operation of the gasifier is also not an engineering  
14 requirement for the operation of Polk Unit 1. In fact,  
15 Polk Unit 1 has dual fuel capability and can operate  
16 using oil should the gasifier be out of service. The  
17 gasifier converts one fuel type to another for use in the  
18 power block, not to serve load or maintain reliability.

19

20 **Q.** What about Mr. Pollock's other assertions regarding the  
21 classification of the scrubber and gasifier?

22

23 **A.** Mr. Pollock tries to have it both ways. He attempts to  
24 dismiss the decision in the stipulation approved by the  
25 Commission in Tampa Electric's last rate proceeding as

1 having no merit while, at the same time, citing PEF and  
2 FPL's stipulations as precedent setting. Mr. Pollock's  
3 position is in basic conflict with itself. The  
4 Commission has carried forward the energy classification  
5 treatment of the Big Bend scrubber in Tampa Electric's  
6 base rates to the energy classification of the Big Bend  
7 scrubber in the environmental cost recovery clause rates,  
8 and should continue to do so.

9  
10 Another way to look at his argument is by way of an  
11 example. If somehow the coal at Big Bend could be  
12 supplied "pre-cleaned" of the elements currently being  
13 removed by the scrubber, then the "pre-cleaned" fuel cost  
14 would be recovered on an energy basis. A similar example  
15 could be made for the gasifier since it converts one fuel  
16 source to another. Mr. Pollock's arguments that the  
17 scrubber and gasifier should be allocated on a demand  
18 basis is flawed and incorrect.

19  
20 **Q.** After reviewing Mr. Pollock's testimony regarding the  
21 appropriate methodology for production cost allocation,  
22 do you have any general observations?

23  
24 **A.** Yes. First, Mr. Pollock acknowledges capital  
25 substitution principles in generation planning which



1 recognize that energy utilization plays a significant  
2 role in determining the type of, and capital investment  
3 in, production plant. Second, his main criticism of a  
4 fully recognized capital substitution method for  
5 generation facilities, which he refers to as the  
6 Equivalent Peaker ("EP") method, is simply the extent  
7 (i.e., how high a percentage) that energy usage is being  
8 recognized. Lastly, Mr. Pollock advocates the continued  
9 use of the 12CP and 1/13<sup>th</sup> AD method that merely utilizes  
10 a smaller percent AD than the 25 percent AD proposed by  
11 the company.

12  
13 All of his points demonstrate that the selection of the  
14 appropriate cost of service study methodology is a  
15 judgment of what amount/percentage of energy  
16 classification should be applied to the production plant  
17 revenue requirements. The 25 percent AD approach is a  
18 more appropriate weight to be assigned.

19  
20 **Q.** Is Mr. Pollock's main criticism that the EP method  
21 allocates capital substitution costs to all energy usage  
22 rather than only that amount of energy usage required for  
23 an economic breakeven between types of generation valid?

24  
25 **A.** Yes, this seems to be his main concern. Although Mr.

1 Pollock's mathematics in his example to support his  
2 premise are correct, the conceptual premise is flawed and  
3 inconsistent with equitable principles that are generally  
4 employed in average cost ratemaking practices. His  
5 example is closer to a marginal costing analysis since,  
6 under his concept, usage beyond the economic breakeven  
7 makes no contribution toward the capital substitution  
8 cost that afforded the benefits. His example also  
9 represents a renting of the car, which ignores  
10 investment. This Commission, for the most part, has  
11 practiced average, embedded costing and pricing  
12 principles in order to avoid inequities and practical  
13 difficulties that can result from the use of marginal  
14 costing when setting electric rates. Under average  
15 pricing, whether it is the first kWh used or the last,  
16 each kWh is a beneficiary of the system's lower operating  
17 cost and should share equally in the capital substitution  
18 investment that afforded the benefit. Finally, it is  
19 important to note that the company has not advocated the  
20 full EP method, which would have allocated as much as 70  
21 percent of production capacity costs on an energy basis.  
22 Rather it proposes a weighting of only 25 percent, which  
23 greatly mitigates some of Mr. Pollock's assertions  
24 regarding the extent that energy usage is considered.

1 Q. Do you have a simple example to demonstrate why it is  
2 more equitable that all energy use, not just the energy  
3 required for breakeven consideration, should bear capital  
4 substitution costs?

5  
6 A. Yes. Consider the decision to purchase a new high  
7 efficiency home air conditioning system for \$2,000.  
8 Assume that this high efficiency system will have a 10-  
9 year life and it will result in \$500 per year lower  
10 electric energy usage. Therefore, the purchase results  
11 in anticipated savings in electric energy usage of \$5,000  
12 over the life of the system. This is a good economic  
13 purchase because the \$5,000 savings less the \$2,000 cost  
14 produces a net benefit of \$3,000. Using Mr. Pollock's  
15 approach, he would take the \$2,000 cost and divide it by  
16 the \$500 annual savings to calculate the breakeven point  
17 of four years. He would then claim that during the first  
18 four years, the customer would realize no net savings;  
19 however, there would be \$500 per year net savings in the  
20 six remaining years.

21  
22 Although Mr. Pollock's concept may be mathematically  
23 correct, this assignment of costs does not represent an  
24 equitable or even realistic viewpoint. Costs should be  
25 matched with savings. In this example, the \$2,000 cost

1 should correspond to the full usage period that savings  
2 are realized which is all 10 years, not just the first  
3 four years. This results in an allocated cost of \$200  
4 per year compared to the annual energy usage savings of  
5 \$500 for an annual net savings of \$300 over the 10-year  
6 life. This is the most equitable treatment of matching  
7 costs and savings.

8  
9 The flaw in Mr. Pollock's breakeven analysis can be  
10 demonstrated in another way using this same air  
11 conditioning system example. If the purchaser of the  
12 more efficient system were to sell his home after four  
13 years, he would expect a greater sales price for the home  
14 by virtue of having the more efficient air conditioning  
15 system as compared to a home without such a system.  
16 Likewise, a purchaser should be willing to pay more for  
17 this home with the expectation of lower electric energy  
18 costs. Under Mr. Pollock's concept, the seller should  
19 not expect to increase the value of his home because he  
20 would conclude that he has fully recovered the additional  
21 cost. However, the purchaser, without paying a premium  
22 for the house, would realize all the remaining electric  
23 energy savings. Costs and benefits are not matched. If  
24 a ratepayer were the seller in this case, he would not  
25 opt to adopt Mr. Pollock's marginal cost perspective.

1 Q. Did Mr. Pollock provide any justification for the  
2 Commission to support 12CP and 1/13<sup>th</sup> AD method for  
3 allocating production capacity cost?  
4

5 A. No. I could not find any real justification other than  
6 his labeling this method as the "currently approved"  
7 methodology. I actually find his testimony supportive of  
8 my position in that he states on pages 36 and 37 of his  
9 testimony that "It is my understanding that the  
10 Commission originally adopted the 12CP and 1/13<sup>th</sup> AD  
11 method to recognize the same economic theory that Mr.  
12 Ashburn associates with the 12CP and 25% AD. Although  
13 the 12CP and 1/13<sup>th</sup> AD allocates production investment  
14 beyond the break-even point, it does so only minimally.  
15 It also recognizes that load duration is a driver that  
16 determines utility investment decisions." I agree with  
17 his entire statement, especially that the current method  
18 only minimally allocates investment beyond the breakeven  
19 point. This is my point. As Mr. Pollock states, the 12  
20 CP and 1/13<sup>th</sup> AD methodology recognizes energy "too  
21 minimally". The appropriate energy classification  
22 deserves a much greater weighting than the minimal eight  
23 percent afforded by the 12 CP and 1/13<sup>th</sup> AD method.  
24

25 Q. In Mr. Pollock's Exhibit JP-7, he attempts to show that

1 using Tampa Electric's methodology for allocating  
2 production plant investment results in an above average  
3 cost per kW of demand for the high load factor classes  
4 without the benefit of less than average fuel cost.  
5 Please comment on this exhibit.  
6

7 **A.** It appears that Mr. Pollock's calculations are simply for  
8 effect. He unitizes plant costs on a 12 CP basis to  
9 illustrate the math that higher load factor classes are  
10 paying more than average for production capacity costs on  
11 this basis. In Document No. 3 of my rebuttal exhibit, I  
12 reproduce Mr. Pollock's exhibit but add a calculation  
13 that illustrates that higher load factor customers are  
14 actually paying less than average production capacity  
15 costs on an energy basis. I do not find any significance  
16 to either my calculation in column four or his in column  
17 three regarding the company's cost allocation  
18 methodology.  
19

20 **Q.** Mr. Pollock recommends that the class coincident peak  
21 demands for the summer and winter peaks be used in lieu  
22 of the average of the 12 monthly coincident peaks to  
23 establish cost responsibility for production capacity  
24 costs. Do you consider this method to be appropriate for  
25 Tampa Electric?

1     **A.**   No.   Tampa Electric's capacity needs in the summer and  
2           winter months are mitigated by the greater amounts of  
3           available load management at the time of peak due to  
4           greater extreme temperatures.   In addition, the company  
5           experiences higher generator capability ratings in the  
6           winter that helps mitigate the winter peak load.   The  
7           company strives to plan its generation outages during the  
8           spring and fall months, resulting in fairly levelized  
9           generating reserve margins in all months.   For these  
10          reasons, Tampa Electric considers contributions to the  
11          average of the 12 monthly peaks to be an appropriate  
12          basis for the demand component in the allocation of  
13          production capacity costs.

14  
15     **Q.**   Is an examination of historical peaking demands and  
16          resulting achieved reserve margins dispositive of this  
17          issue as contended by Mr. Pollock?

18  
19     **A.**   No.   Tampa Electric plans its system to meet normal  
20          weather and to achieve a future reserve margin  
21          requirement.   The past several years have exhibited  
22          abnormally warm winter weather resulting in lower than  
23          expected winter peaks thus resulting in higher actual  
24          achieved winter reserve margins.   These results are not  
25          useful in determining whether using 12 monthly peaks is

1 appropriate; only weather normalized results are useful.

2  
3 **TREATMENT OF INTERRUPTIBLE SERVICE**

4 **Q.** Mr. Pollock identifies interruptible power as a primary  
5 option for demand response resources. Do you agree with  
6 that assessment?

7  
8 **A.** Yes, interruptible service is one of Tampa Electric's  
9 demand response resources used to reduce load while  
10 continuing to provide service to firm customers. Other  
11 demand response resources include:

- 12 • Residential and commercial load management  
13 ("PrimeTime") which involves direct load control of  
14 space heating and cooling equipment, water heaters  
15 pool pumps, and other such equipment;
- 16  
17 • GSLM-2 and GSLM-3 interruptible service conservation  
18 programs, which provide the same interruptible service  
19 as is provided under the current IS rate schedules;
- 20  
21 • Residential price responsive load management ("Energy  
22 Planner"), which utilizes a tiered pricing structure  
23 with a smart thermostat; Standby generator program  
24 which provides credits to customers for load transfer  
25 • during critical periods; and,



1 • Commercial/industrial demand response, which is  
2 facilitated through a third party vendor.

3  
4 **Q.** Are the load characteristics of interruptible power  
5 customers similar to the load characteristics of  
6 customers participating in these other demand response  
7 programs?

8  
9 **A.** Yes, particularly among commercial customers engaged in  
10 manufacturing. The company has many customers  
11 participating in its standby generation and third party  
12 demand response programs that have high load factors with  
13 significant demands available for response.

14  
15 **Q.** How has the Commission allowed Tampa Electric to manage  
16 these various demand response programs?

17  
18 **A.** Since 1982, the Commission has consistently recognized  
19 the value of demand response programs and approved Tampa  
20 Electric's management of these programs through the  
21 Energy Conservation Cost Recovery ("ECCR") clause. The  
22 approval process has included reviews of program cost-  
23 effectiveness, incentive levels, and administration and  
24 marketing costs.

25

1 Q. How have the incentive levels varied over the life of  
2 these demand response programs?

3  
4 A. Since 1982, the incentive levels for these various demand  
5 response programs have consistently increased. This  
6 upward trend has occurred in spite of annual cost-  
7 effectiveness reviews using volatile costs associated  
8 with avoided unit construction. This upward trend is  
9 also evident in the level of the contracted credit value  
10 ("CCV") established since the inception of GSLM-2 and  
11 GSLM-3 in 2000. Mr. Pollock's only reference to this is  
12 on page 62 of his testimony where he acknowledges that  
13 the values have been subject to change. He fails to  
14 mention that the values have increased in each of the  
15 seven years he brackets except for one when there was a  
16 minor reduction. This upward trend reflects the  
17 increasing cost of generation.

18  
19 Q. Is Mr. Pollock's assessment of the CCV for 2009 correct?

20  
21 A. No. The CCV for 2009 was approved by this Commission in  
22 Order No. PSC-08-0783-FOF-EG, issued on December 1, 2008  
23 in the 2008 ECCR proceeding. The CCV methodology used  
24 was consistent with prior determinations and similar to  
25 other Commission-approved credit and program cost

1 effectiveness measurements. Mr. Pollock's concerns about  
2 the CCV and related issues would have been more  
3 appropriately addressed in the aforementioned docket, a  
4 docket to which FIPUG was an active participant. It is  
5 not appropriate to review the CCV, the avoided unit  
6 selection, the timing of capacity benefits, the  
7 appropriate benefit-cost ratio, and the application of  
8 the CCV to the load reduction achieved by customers in  
9 this base rate proceeding. These issues should have been  
10 and still can be addressed in the ECCR proceeding.

11  
12 **Q.** Mr. Pollock has presented the results of a cost of  
13 service study that he sponsors as Exhibit JP-10. How is  
14 the IS rate class treated in this study?

15  
16 **A.** Mr. Pollock treats the IS customers as a separate rate  
17 class in his study and allocates costs to the class as  
18 though they have firm load characteristics. However, his  
19 rate treatment of interruptible demand credits is not  
20 clear. On pages 61 through 63 of his testimony, Mr.  
21 Pollock expresses concern regarding the treatment of  
22 payments and cost recovery of interruptible credits  
23 through the ECCR and he proposes that these payments and  
24 costs be set in base rates. Yet, I find no such  
25 treatment in his cost of service study in Exhibit JP-10.

1 I would presume that his presentation assumes the  
2 interruptible credits are being treated as costs for  
3 recovery in the ECCR clause.  
4

5 **Q.** Mr. Pollock asserts the company has understated the value  
6 of the interruptible credit. Should the credit be  
7 revised to a higher level as he has calculated?  
8

9 **A.** No. As stated previously, the calculation of the CCV  
10 should remain within the conservation docket and  
11 associated with GSLM-2 and GSLM-3 service to which the  
12 current IS customers, after being consolidated into the  
13 GSD rate class, should subscribe. It should be  
14 recognized that the company's 2009 approved CCV of \$10.91  
15 per coincident peak kW used for the GSLM-2 or GSLM-3  
16 rider represents a 46 percent increase over the prior  
17 CCV. This is a significant increase in value for  
18 interruption and should not be increased any further  
19 through base rates.  
20

21 It is also important to note that the interruptible  
22 credit based on the 2009 CCV results in interruptible  
23 customers realizing a 62 percent discount in cost for  
24 production capacity as compared to firm GSD customers.  
25 This is a very fair discount for valuing interruptible

1 load. It is entirely unnecessary to go beyond this level  
2 of discount to encourage or maintain interruptible  
3 customers. To do so would unfairly shift costs to other  
4 customers.

5  
6 Document No. 4 of my rebuttal exhibit shows the  
7 development of the resultant discount being realized by  
8 general service interruptible customers under the  
9 company's proposed rates. If Mr. Pollock's  
10 recommendation of a CCV of \$13.60 were adopted, the  
11 exhibit shows the value would represent a 78 percent  
12 discount to interruptible customers for production  
13 capacity service. This type of discount is excessive and  
14 unnecessary to encourage and maintain general service  
15 interruptible load.

16  
17 **Q.** Mr. Pollock expresses concern regarding the load factor  
18 adjusted credit structure of the CCV. Is his concern  
19 justifiable?

20  
21 **A.** No. The use of a load factor adjusted credit is an  
22 equitable rate design for application to the wide range  
23 of usage characteristics inherent in the group of  
24 interruptible customers. PEF has consistently used this  
25 design for establishing credits since 1995.

1 Since the CCV is an amount established per kW of demand  
2 coincident with the company's monthly system peaks, this  
3 full credit value should only be applied to a customer's  
4 demand coincident with the system peak. The load factor  
5 approach utilized in the GSLM-2 and GSLM-3 conservation  
6 programs is a proxy for estimating a customer's load  
7 coincident with the system peak.

8  
9 Mr. Pollock's suggestion to estimate customers'  
10 coincident load by establishing and monitoring loads  
11 during "base line" periods, or alternatively measuring  
12 interruptible customers' demand in real-time, would  
13 impose a burdensome analysis requirement and would result  
14 in billing delays, without providing any assurance of a  
15 meaningful improvement in the estimation of coincident  
16 demand.

17  
18 The load factor adjusted demand approach can be compared  
19 to another method proffered by Mr. Pollock for  
20 establishing a fixed credit amount based solely on  
21 billing demand. Document No. 5 of my rebuttal exhibit  
22 depicts the two methods of crediting over the full range  
23 of customer load factors and compares these to an  
24 estimated desired credit based on empirically estimated  
25 utility load research relating coincidence factor and

1 load factor. It is obvious from this exhibit that the  
2 load factor adjusted rate design is a superior rate  
3 design to the fixed credit amount based on billing  
4 demand.

5  
6 **Q.** On pages 41 and 42 of his testimony, Mr. Pollock asserts  
7 that interruptible customers should not have to share in  
8 the cost recovery of credits paid to them. Do you agree?

9  
10 **A.** No. This is an incredible assertion that reveals Mr.  
11 Pollock's complete misunderstanding of the purpose of the  
12 credits. Interruptible customers are paid credits  
13 because, in effect, they have the capability of providing  
14 additional production capacity to the system. Having the  
15 capability to interrupt service and to dispatch other  
16 demand response programs all provide alternative  
17 resources to real generating capacity or purchased power  
18 capacity from another system. The mechanism for  
19 recovering the cost of credits provided to interruptible  
20 service customers should be no different from the cost  
21 recovery of real generating capacity, purchased power  
22 payments, or credits paid for effective capacity provided  
23 from other demand response programs.

24  
25 The only intended difference in the general service rate

1 structure between firm service and interruptible service  
2 is the credit. There is no basis for interruptible  
3 customers being exempt from any costs that establish the  
4 costs for firm service. If interruptible customers were  
5 afforded such treatment, which is over and above the  
6 cost-supported credit, the rate difference would exceed  
7 the interruptible credit and would not yield the desired  
8 rate design result.

9  
10 In Mr. Pollock's cost of service study in JP-10, he did  
11 not exempt interruptible customers from sharing in the  
12 cost of the company's generating facilities when  
13 establishing base rate cost responsibility. He has not  
14 sought exemption for interruptible customers sharing in  
15 the cost of purchased power. He has also not sought  
16 exemption from interruptible customers sharing in the  
17 capacity costs of other demand response programs.  
18 Interruptible customers supporting the costs of the  
19 general service interruptible demand response program is  
20 no different.

21  
22 Further, to demonstrate the ridiculousness of his  
23 assertion, I'll use another example. Assume the owners  
24 of a 10-unit condominium complex need to have their  
25 building painted. A painting contractor estimates the



1 work will cost \$1,000. Clearly, each unit owner should  
2 pay \$100. However, assume the condominium selects a  
3 painter who also happens to be a unit owner. Under Mr.  
4 Pollock's reasoning and assertion, the unit owner  
5 providing the painting service should receive \$1,000 for  
6 his services and should not be required to pay his \$100  
7 share. This is outlandish reasoning and the type of  
8 confused thinking Mr. Pollock has tried to create with  
9 this issue.

10  
11 **CLASS REVENUE ALLOCATION**

12 **Q.** What are Mr. Pollock's conclusions and recommendations  
13 with regard to class revenue allocation?  
14

15 **A.** After making many statements supporting the application  
16 of cost-based ratemaking, many of which I agree with in  
17 theory, he alleges that Tampa Electric is proposing a  
18 revenue increase for IS customers of 134 percent compared  
19 to an overall increase request of 26.4 percent. However,  
20 he immediately admits that Tampa Electric's proposed  
21 treatment for existing IS customers would result in an  
22 "effective" base revenue increase of 35.5 percent. He  
23 also explains that under his revised cost of service  
24 study, the IS class would merit a rate decrease along  
25 with the Lighting Facility rates. After stating that he

1 would not recommend any class receiving a decrease, he  
2 provides a recommended class revenue allocation in his  
3 exhibit JP-14.

4  
5 **Q.** Do you agree with Mr. Pollock's recommended class revenue  
6 allocation?

7  
8 **A.** No. As I described in the first section of my testimony,  
9 I do not agree with Mr. Pollock's proposed revisions to  
10 the retail class cost of service study. I also do not  
11 agree with his proposed rate design for current IS  
12 service. Consequently, I do not agree with his  
13 recommended class revenue allocation.

14  
15 Mr. Pollock's revenue allocation approach, while moving  
16 proposed revenues closer to cost under his cost of  
17 service model, serves to reduce revenue collected from IS  
18 customers and increase revenue collected from all other  
19 classes, most importantly and substantially the  
20 residential service class. The appropriate value of  
21 interruptible service is recognized in Tampa Electric's  
22 proposal through cost of service, rate design and revenue  
23 allocation. Mr. Pollock's proposal is not a reflection  
24 of gradualism, as he suggests, but recidivism.

25

1 **FIRM RATE DESIGN**

2 **Q.** What are Mr. Pollock's conclusions and recommendations  
3 with regard to Tampa Electric's proposed rate design for  
4 firm service?

5  
6 **A.** On page 51 of his testimony, Mr. Pollock states "TECO has  
7 underpriced the demand charge and overpriced the energy  
8 charge (based on the company's proposed revenue levels).  
9 The demand and non-fuel energy charges should closely  
10 reflect the corresponding demand and non-fuel energy  
11 related costs as derived in the retail class cost of  
12 service study." He recommends that the non-fuel energy  
13 charge for the IS rate schedule be set at the per unit  
14 energy cost from his proposed cost of service study.  
15 Later, Mr. Pollock discusses meter level and transformer  
16 ownership discounts as appropriate mechanisms to reflect  
17 the lower cost of providing primary and subtransmission  
18 service. He appears to take no issue with how Tampa  
19 Electric applied the meter level discount; however, he  
20 does criticize the company's calculation of the  
21 transformer ownership discount credits, alleging that  
22 ratcheted rather than billing demand was used as the  
23 divisor, thus inappropriately understating the resulting  
24 credits.

25

1 Q. Do you agree with Mr. Pollock's recommendation regarding  
2 the appropriate non-fuel energy rate for IS rate  
3 schedule?

4  
5 A. No. First, his proposed energy charge applies to the IS  
6 rate schedule, which the company has proposed to  
7 eliminate and his proposed energy rate for the IS rate  
8 schedule is derived from his unreasonable cost of  
9 service. Second, his recommendation addresses the energy  
10 charge alone without addressing the demand, customer, or  
11 other rate charges. Rate design for electric service,  
12 both in theory and as practiced at the Commission, has  
13 focused on first setting the more fixed components, the  
14 customer charge and demand charge, and then setting the  
15 more variable component, the energy charge. Finally, his  
16 recommendation for the IS non-fuel energy rate did not  
17 address how to design the rate for time of use. This  
18 limited approach of rate design is inappropriate and his  
19 recommendations should be rejected.

20  
21 Q. Do you agree with Mr. Pollock's conclusion that Tampa  
22 Electric understated its proposed transformer ownership  
23 discounts by dividing the avoided cost by the ratcheted  
24 demand rather than the actual billing demand?

25

1 **A.** No. He is incorrect. The transformer ownership discount  
2 for the proposed, combined GSD class was actually  
3 calculated by dividing the avoided cost by the projected  
4 billing demand as shown in MFR Schedule 14, Supplement B,  
5 page 169 of 175. Ratcheted demand was not used in these  
6 calculations and the proposed transformer ownership  
7 discounts were not understated.

8  
9 **Q.** Mr. Pollock claims there are no demand ratchets in Tampa  
10 Electric's tariffs. Do you agree?

11  
12 **A.** No. The company's tariffs for Standby Service contain  
13 monthly reservation charges for local facilities. These  
14 charges are derived and applied on a ratcheted demand  
15 basis. Where applicable, a transformer ownership  
16 discount is also applied to the same ratcheted demand  
17 measurement. Therefore, the development of the  
18 transformer ownership discount for standby customers must  
19 be derived by dividing the avoided cost by the ratcheted  
20 demands. The company appropriately utilized ratcheted  
21 demand only to calculate the transformer ownership  
22 discount for the standby rate schedule.

23

24 **SUMMARY OF REBUTTAL TESTIMONY**

25 **Q.** Please summarize your rebuttal testimony.

1   **A.** My rebuttal testimony addresses key concerns and  
2   disagreements with Mr. Pollock's testimony. I reject his  
3   criticisms and recommended revisions to Tampa Electric's  
4   proposed retail class cost of service study. I provide  
5   further support that the GSD, GSLD and IS classes can and  
6   should be consolidated into one GSD class. I rebut his  
7   arguments about the proper classification of the scrubber  
8   and gasifier investments and clarify why they are  
9   properly classified to energy. I show why his objections  
10  to the 12 CP and 25% AD method for allocating production  
11  plant are not reasonable in this case. I also  
12  demonstrate how Mr. Pollock's recommendations on cost  
13  support and the pricing of interruptible service are  
14  regressive, provide too generous a benefit, and attempt  
15  to lock in this overgenerous benefit to the detriment of  
16  all other customers. Finally, my testimony rejects Mr.  
17  Pollock's revised class revenue allocation, his  
18  recommendation to move all energy and demand rates  
19  completely to unit cost as well as his criticism of Tampa  
20  Electric's calculation of its transformer ownership  
21  discounts and method of measuring and applying the  
22  interruptible credit.

23  
24  **Q.** Does this conclude your rebuttal testimony?  
25

1 **A.** Yes, it does.

2

3

4

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6

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TAMPA ELECTRIC COMPANY  
DOCKET NO. 080317-EI  
WITNESS: ASHBURN  
REBUTTAL EXHIBIT NO. \_\_\_\_ (WRA-2)

REBUTTAL EXHIBIT

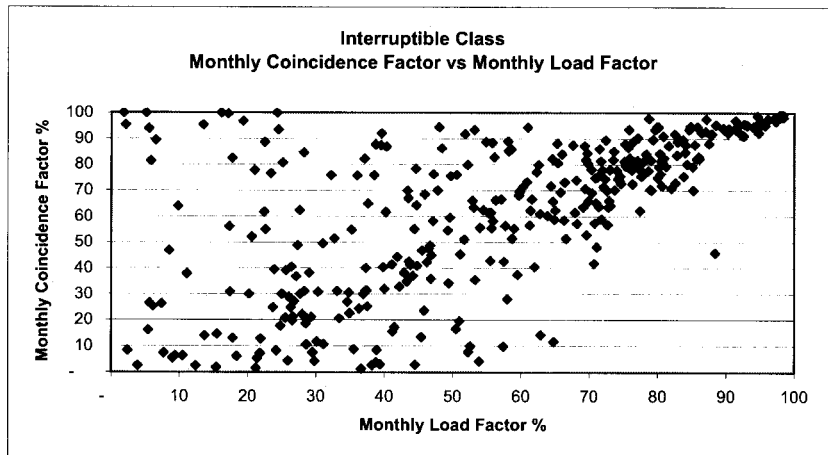
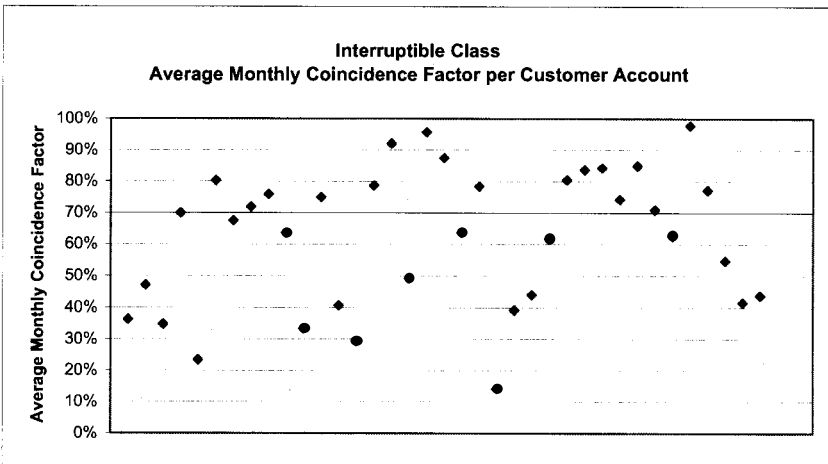
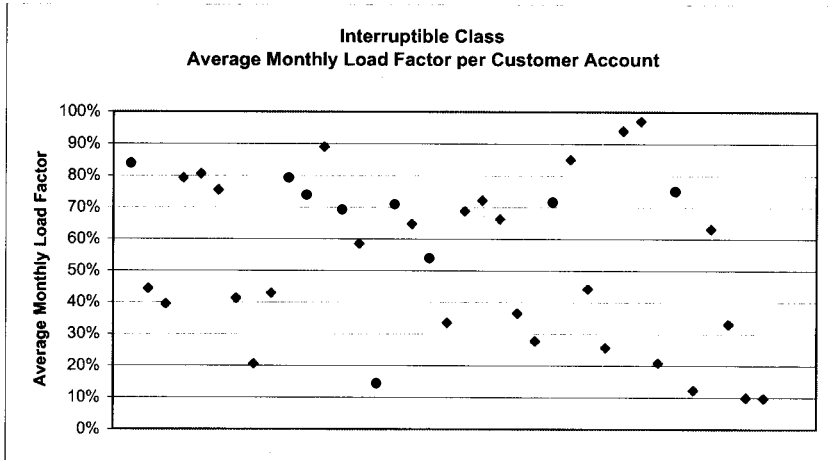
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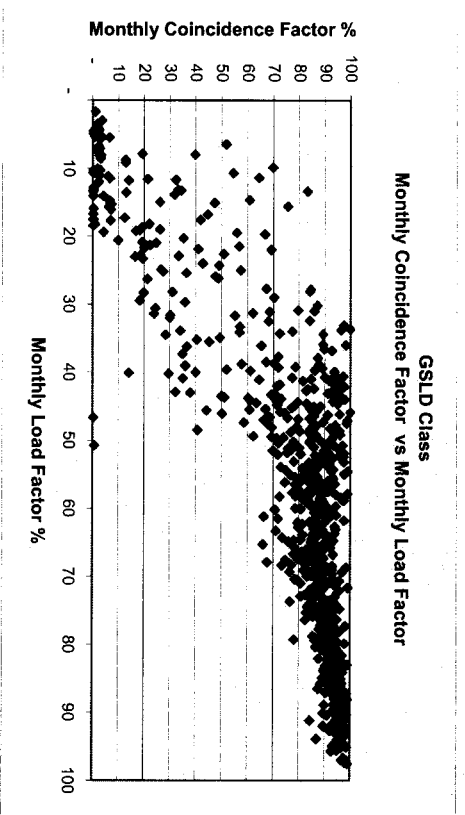
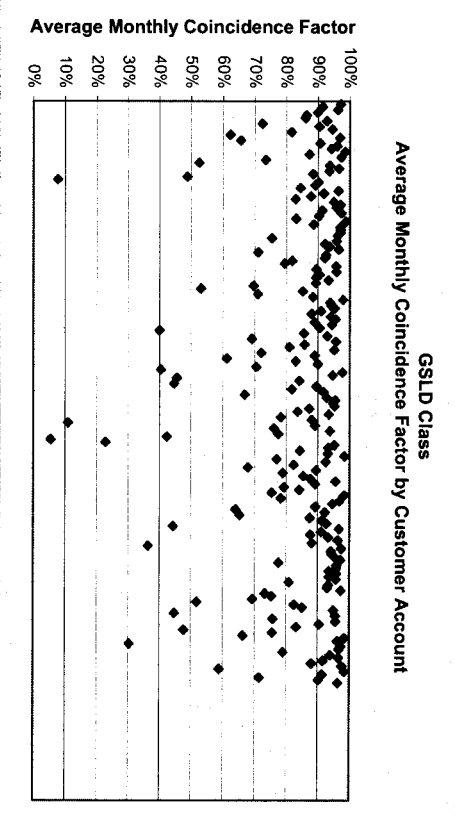
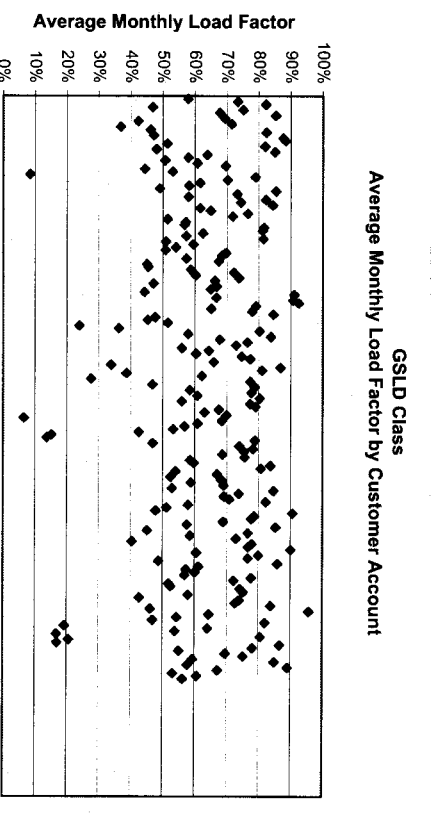
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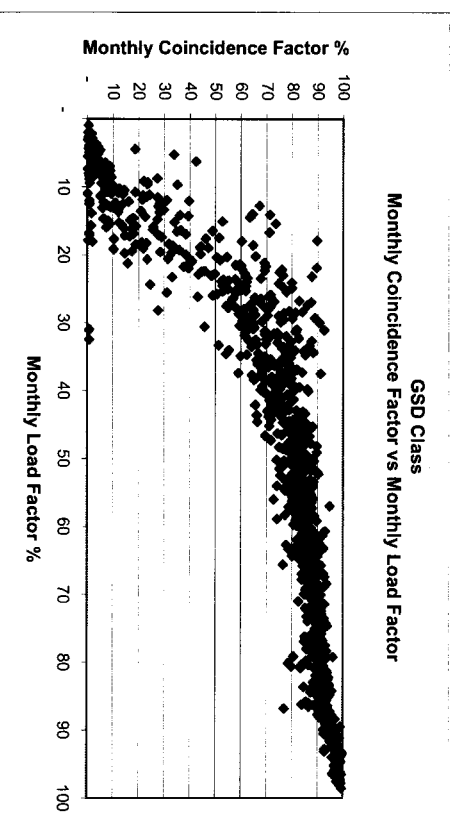
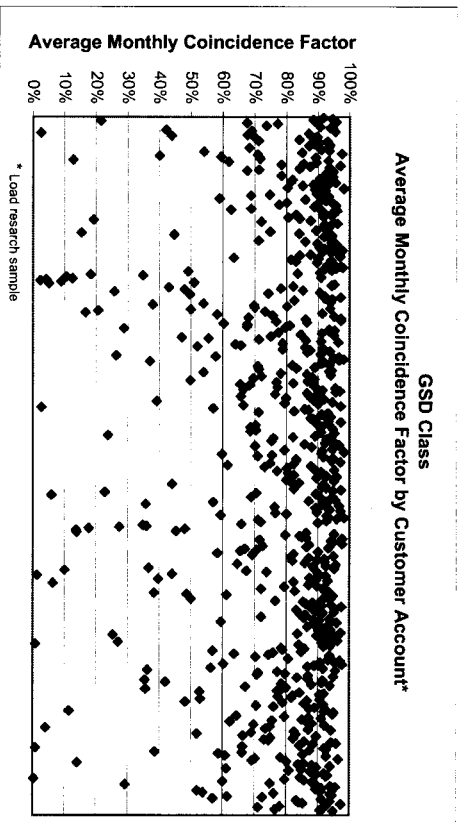
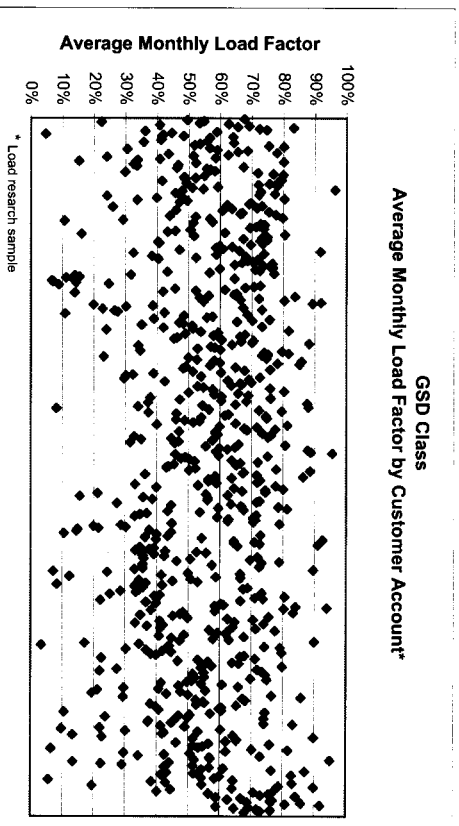


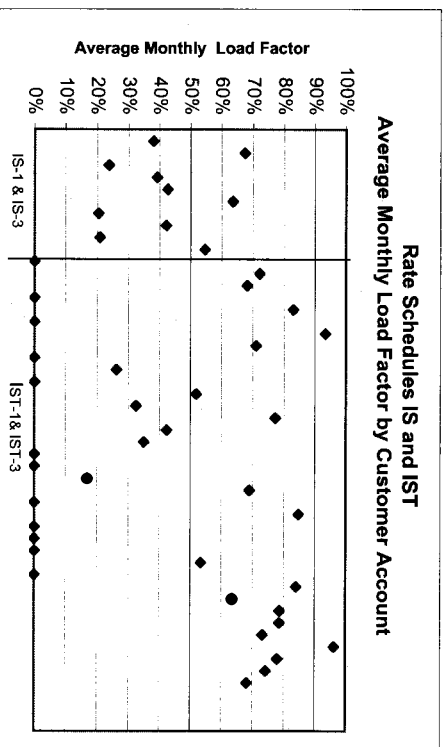
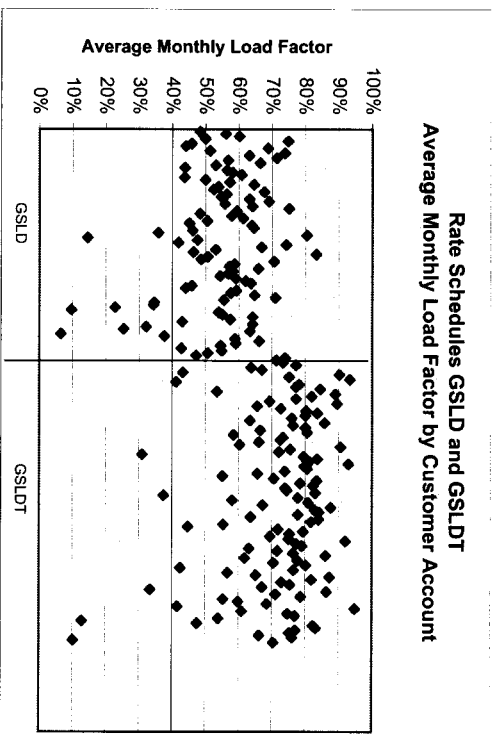
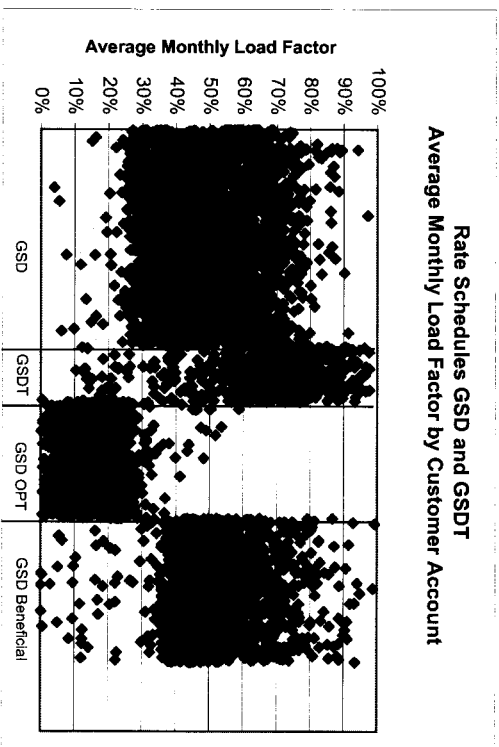
TABLE OF CONTENTS

| DOCUMENT NO. | TITLE  | PAGE |
|--------------|--|------|
| 1            | Average Monthly Load Factor, Average Monthly Coincidence Factor and Monthly Coincidence Factor vs. Monthly Load Factor Scattergrams for GSD, GSLD and IS | 39   |
| 2            | Average Monthly Load Factor Scattergrams for GSD, GSLD and IS by Rate Schedule   | 42   |
| 3            | Revised Pollock Exhibit JP-7   | 43   |
| 4            | Discount Being Realized by General Service Interruptible Customers Under the Company's Proposed Rates  | 44   |
| 5            | Comparison of IS Credit Rate Designs   | 45   |









**TAMPA ELECTRIC COMPANY**

**Determination of Effective Production Capacity Cost Discount for Interruptible Service**

Reflects Proposed GSD Costs, Charges and Credits

| <u>I. Production Capacity Cost Component</u>    | <u>Per Unit<br/>Amount<br/>\$/kw-mo.</u> | <u>Reference Source</u>                          |
|---|--|--|
| a. GSD Base Functionalized Cost of Service      | \$ 7.32                                  | 12CP & 25%AD COS, p. 32 of 83, col. GSD, line 41 |
| b. GSD Capacity Cost Recovery Charge            | \$ 1.73                                  | MFR Schedule A-2, p. 6 of 12                     |
| c. GSD Energy Conservation Cost Recovery Charge | \$ 0.74                                  | MFR Schedule A-2, p. 6 of 12                     |
| Total GSD Prod. Cap. Cost                       | \$ 9.79    100%                          |  |

| <u>II. Interruptible Demand Credit</u> | <u>Company<br/>Proposed</u> | <u>Pollock<br/>Proposed</u> |   |
|--|-----------------------------|-----------------------------|---|
| d. GSLM-2 CCV amount                   | \$10.91                     | \$13.60                     | Proposed GSLM-2 Rider   |
| e. Times                               | x                           | x                           |   |
| f. Average IS customer load factor     | 56%                         | 56%                         | IS average customer load factor per COS billing units<br>Sum Bill kW = 3,356,134; Bill kW = 1,371,644 MWh |
| Equals: Interruptible Demand Credit    | \$ 6.11    62%              | \$ 7.62    78%              |   |

III. Interruptible Contribution to Prod. Cap. Cost

|   |                |                 |
|---|----------------|-----------------|
| GSD Prod. Cap. Cost less Int. Demand Credit | \$ 3.68    38% | \$ 2.17    -78% |
|---|----------------|-----------------|

Revised Pollock Exhibit JP-7

TAMPA ELECTRIC COMPANY

Allocation of Production Plant and Fuel Costs  
Under the 12 CP-25% AD Method  
Test Year Ending December 31, 2009

| Line | Rate Class      | Allocated Net Production Plant |                    |                       |                     |                      |                      | Recovery of Fuel and<br>Purchase Power Expense |                     |  |
|------|-----------------|--------------------------------|--------------------|-----------------------|---------------------|----------------------|----------------------|--|---------------------|--|
|      |                 | B<br>Amount<br>(000)           | C<br>12 CP<br>(MW) | D<br>Sys. Req.<br>GWH | E<br>\$ Per<br>(kW) | F<br>\$ Per<br>(MWh) | G<br>Amount<br>(000) | H<br>Energy<br>(GWh)                           | I<br>¢ Per<br>(kWh) |  |
| 1    | RS              | 1,080,580                      | 2041               | 9566                  | 530                 | \$ 112.96            | 567,196              | 9566   | 5.93                |  |
| 2    | GS              | 123,569                        | 234                | 1150                  | 528                 | \$ 107.45            | 68,214               | 1150   | 5.93                |  |
| 3    | GSD             | 517,619                        | 923                | 5935                  | 561                 | \$ 87.21             | 351,926              | 5935   | 5.93                |  |
| 4    | GSLD            | 212,686                        | 370                | 2697                  | 576                 | \$ 78.86             | 159,918              | 2697   | 5.93                |  |
| 5    | IS              | 99,541                         | 115                | 1424                  | <b>864</b>          | <b>\$ 69.90</b>      | 84,405               | 1424   | 5.93                |  |
| 6    | SL/OL<br>Energy | 6,729                          | 5                  | 238                   | 1,381               | \$ 28.27             | 14,102               | 238  | 5.93                |  |
| 7    | FL Juris        | <u>2,040,724</u>               | <u>3,688</u>       | <u>21,010</u>         | <u>\$ 553</u>       | <u>\$ 97.13</u>      | <u>1,245,761</u>     | <u>21,010</u>                                  | <u>5.93</u>         |  |

Note: Columns in italics are additions to Pollock Exhibit JP-7, Page 1 of 2.

