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BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

In The Matter of	DOCKET NO. 891345-EI
Application of GULF POWER COMPANY for an increase in rates and charges.	HEARING SIXTH DAY EVENING SESSION

VOLUME - XIV

Pages 2030 through 2183

FPSC Hearing Room 106
Fletcher Building
101 E. Gaines Street
Tallahassee, Florida 32399

Monday, June 18, 1990

Met pursuant to adjournment at 12:30 p.m.

BEFORE: COMMISSIONER MICHAEL McK. WILSON, CHAIRMAN
COMMISSIONER GERALD L. GUNTER
COMMISSIONER THOMAS M. BEARD
COMMISSIONER BETTY EASLEY

APPEARANCES:

(As heretofore noted.)

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I N D E X

WITNESSES

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EXHIBITS

Number:		Identified	Admitted
385	(Brown)	2035	2035
606	(Brown)	2043	2045
350	Through 353 (Wright)	2049	
607	(Wright)	2164	2181

EVENING SESSION

(Transcript follows in sequence from Volume XIII.)

MR. STONE: Commissioner, that completes Gulf's direct case.

CHAIRMAN WILSON: All right.

MR. STONE: There has been some discussion about a change in the order of witnesses that I was supposed to check into during the last break, and I have some additional information to share with the Commission. I don't know if you want to discuss it now or --

CHAIRMAN WILSON: Let's go off the record for about five minutes, and we'll talk about what we're going to do.

(Discussion off the record)

CHAIRMAN WILSON: Back on the record.

Call your witness, Mr. Burgess.

MR. BURGESS: We call Mr. Wright.

MR. McWHIRTER: What about Ms. Brown, do you want to do her?

CHAIRMAN WILSON: Following Mr. Wright.

MR. VANDIVER: Very well. May I send Mr. Freeman home, then?

CHAIRMAN WILSON: Yes.

MR. McWHIRTER: You can probably get Ms. Brown done.

CHAIRMAN WILSON: If she's going to take 10 or 15 minutes, bring Ms. Brown down and take her, and then she can go home and be done with her.

MR. VANDIVER: I'll run up and get her.

CHAIRMAN WILSON: We'll stand in informal recess while you run up and get her.

(Brief recess.)

THE REPORTER: Was she sworn?

MR. HASKINS: No.

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KATHRYN DYAL BROWN

appeared as a witness on behalf of the Staff of the Florida Public Service Commission, and after being first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. VANDIVER:

Q Could you state your name and address for the record, please?

A Kathryn Dyal Brown, Consumer Affairs Division, 101 East Gaines Street, Tallahassee.

Q Did you cause to be filed six pages of prefiled direct testimony in this case?

A Yes, I did.

Q Do you have any additions or corrections to make to that testimony at this time?

A I have one correction. On Page 5, Line 20, it should read "Gulf Power complaints increased by 33% in 1989."

Q With that correction, if I were to ask you the questions contained in your direct prefiled testimony, would your answers be the same?

A Yes. They would.

MR. VANDIVER: Commissioner, I would like to have Ms. Brown's testimony inserted into the record as though read.

CHAIRMAN WILSON: Without objection it will be so inserted into the record.

MR. VANDIVER: I believe her exhibits have been previously stipulated into the record.

(Exhibit No. 385 stipulated into evidence.)

Q. State your name and address.

A. Kathryn Dyal Brown, 101 E. Gaines Street, Tallahassee, Florida 32399.

Q. Where are you employed?

A. I am employed in the Consumer Affairs Division of the Florida Public Service Commission.

Q. Briefly describe your position and duties.

A. As a Senior Consumer Affairs Analyst, I receive and investigate complaints against regulated utilities. I work with utility companies and their customers to achieve resolution of complaints. I provide explanation and counseling on various matters related to utility company rates and service and compliance with PSC rules and utility company tariffs. I keep records of complaint activity filed against utilities and prepare reports and charts outlining this activity.

Q. Describe the nature of your testimony.

A. My testimony will set forth the complaint activity in the Consumer Affairs Division involving Gulf Power Company. Exhibits will show the number and type of complaints received, the justification for the customer having contacted the commission, and the complaint activity of Gulf Power Company compared with other electric companies.

Q. What time period will your testimony encompass?

A. My testimony will focus on the complaint activity of calendar

years 1985-1989. The months of January, February and March 1990 will also be included.

Q. Describe any preliminary screening that may take place before a complaint is logged to be investigated.

A. A complaint is not logged unless the analyst receiving the contact determines that the matter appears to be within the jurisdiction of the commission and that there is reason to believe that the complaint may be justified. If it appears there is nothing the commission can do to help, or the complaint is clearly not justified, the citizen is so advised.

Q. What procedure is followed when a complaint is logged?

A. Information is entered on a consumer request form and the company is requested to review the complaint and respond. When the response has been received, both the complaint and the response are reviewed by Consumer Affairs personnel to determine compliance with commission rules and company tariffs and to determine what other action, if any, needs to be taken. Before a complaint is closed, the analyst handling the case customarily contacts the complainant to verify his satisfaction or discuss the action taken and the applicable rules and tariffs.

Q. How many complaints were logged against Gulf Power Company during 1989?

A. Records show that 76 complaints (.308 per 1000 customers) were logged against Gulf Power Company during 1989.

Q. How do these figures compare with complaint activity for 1988?

A. Complaints were up 33% from 1988. There were 76 complaints logged against the company during 1989, compared to 57 during 1988.

Q. How do these figures compare with complaint activity figures for the preceding calendar years?

A. This comparison is shown in Attachment I. Attachment I is a graph of Gulf Power's complaint activity for the past 10 years. Listed below the graph are the actual number of complaints received during those years and the number of complaints received per 1000 customers.

Q. Do Consumer Affairs records show what part of Gulf Power's service area had the most complaints?

A. The majority of the company's complaints originated in Escambia county, where complaints more than doubled from 1988 figures. During 1989 customers in Escambia county logged 33 complaints followed by Santa Rosa (18), Bay (10), Okaloosa (12), and Washington (3).

Q. What types of complaints were received against Gulf Power Company during 1989?

A. During 1989, Consumer Affairs received 45 complaints about billing and 31 about service related matters.

Q. Are complaints classified more specifically?

A. Yes. After an analyst takes a complaint he or she determines whether the complaint is related to a service or billing

problem. Then the analyst chooses one of approximately 30 more specific classification categories to further identify the complaint.

Q. What were the major types of complaints received against Gulf Power during 1989?

A The two major complaint categories were high bills and delayed new connections. Although complaints were up slightly in a number of different categories, no one particular type of complaint contributed to the increase.

Q. Have you made a more specific study on the type of problems complained about?

A. Yes. Attachment IIA sets forth in more detail the various types of complaints which were received and closed during 1989, and the justification for each type. Attachment IIB is a chart illustrating the major types of complaints received against Gulf Power.

Q. How is justification for a complaint determined?

A. When the complaint analyst reviews the company's report and closes the complaint, the analyst determines whether the complaint was justified, not justified or had some justification. The determination is noted on the complaint file. In each case, determination is based on commission rules, company tariffs, and/or common sense guidelines. Every effort is made to be as objective as possible.

Q. What was the justification for the Gulf Power Company

complaints closed during 1989?

A. During 1989, 66 complaints against the company were received and closed. Of these, 14 were found to be justified, 34 were not justified, and 18 were found to have some justification. These figures are shown in Attachment III.

Q. Have you compared the justification for the complaints closed to previous periods?

A. Yes. These figures are also in Attachment III.

Q. Have you compared the complaint activity of Gulf Power Company with that logged against other companies?

A. Yes. Attachments IVA and IVB compare all electric companies for the calendar years 1985 through 1989 and include the number and type of complaints logged, the percentage of increase from the previous year, a breakdown of the justification, the number of complaints and justified complaints per 1000 customers and industry totals.

Q. How does Gulf Power Company compare to the other electric utilities in the areas you have analyzed?

A. After a two year downward trend in complaint activity, Gulf Power complaints increased by 33 percent in ~~1988~~ 1989. The percentage of logged complaints found to be justified increased from 13 percent in 1988 to 21 percent in 1989. Fifty-two percent of Gulf Power complaints were found to have no justification. After three years of maintaining the lowest number of complaints and justified complaints per 1000

customers, Gulf Power had the second highest number of complaints and justified complaints of any of the four major electric utilities during 1989. There were .308 complaints per 1000 customers, and .057 justified complaints per 1000 customers as shown on Attachment IVA and IVB.

Q. Have you compiled data on the number and type of complaints received against Gulf Power in 1990?

A. Yes, Attachment V shows the number, major type and justification of complaints received against Gulf Power and all other electric utilities during the first quarter of 1990.

Q. What observations have you made from the 1990 complaint data?

A. For the first three months of 1990 Gulf Power had the fewest complaints per 1000 customers of the five regulated electric companies. Of the complaints closed in January, February and March of 1990 only Florida Power Corporation had fewer justified complaints per 1000 customers than Gulf Power Company. Gulf Power is the only company that had a drop in the total number of complaints received during 1990 in comparison with the same three months of 1989.

Q. Does this conclude your testimony?

A. Yes.

(End of Prefiled Direct Testimony)

Q (By Mr. Vandiver) Ms. Brown, could you provide us with a brief summary of your testimony, please?

A Yes. My testimony describes the complaint activity in the Consumer Affairs Division involving Gulf Power Company. It compares Gulf Power Company's complaint activity with that of the other regulated electric companies. The number of complaints received against Gulf Power Company decreased in 1987 and 1988, but increased by 33% in 1989. During the first three months of 1990, the number of complaints received dropped by 13%, while complaints for the electric industry as a whole showed a 26% increase.

The number of complaints received per 1,000 customers was less than the industry average in each of the five years studied except for 1989. The number of justified complaints received per 1,000 customers was below the industry average for each of the other years.

Q Does that complete your summary?

A Yes.

MR. VANDIVER: The witness is tendered for cross examination.

CROSS EXAMINATION

BY MR. HOLLAND:

Q Ms. Brown, just a few brief questions. Do

you have with you the complaint data for the month of April 1990?

A Yes, I do. I have it through May.

Q Through May? Can you give us the updated figures?

A I can give one to everyone, if you would like.

Q Okay. That might facilitate. (Document distributed)

CHAIRMAN WILSON: Witnesses shouldn't have to hand out their own exhibits. Witnesses shouldn't do this.

WITNESS BROWN: Those are the totals for January through May 1990.

CHAIRMAN WILSON: Would you like to mark this as an exhibit?

MR. HOLLAND: Could I have just a second? (Pause)

Commissioners, I think we should go ahead and mark it.

CHAIRMAN WILSON: That would be Exhibit No. 606?

MR. PRUITT: That's correct.

(Exhibit No. 606 marked for identification)

COMMISSIONER GUNTER: Can I ask you one

question, just looking real quick?

WITNESS BROWN: Uh-huh.

COMMISSIONER GUNTER: I don't understand Florida Public Utilities. They had one service, one billing, and there's two yes, and two no.

WITNESS BROWN: Okay. That's because -- that will be confusing on all the charts. That's a good question. It's because we received only two complaints from January to May, but we closed more than that, we could have closed some from previous months.

COMMISSIONER GUNTER: Got you.

WITNESS BROWN: And that will happen on a lot of the figures.

Q (By Mr. Holland) Ms. Brown, let me -- Commissioner, may I proceed?

COMMISSIONER GUNTER: Go ahead.

Q (By Mr. Holland) Just to make sure that I understand Exhibit 606, and I'm looking at the bottom set of numbers, in terms of the total number of complaints received year-to-date, Gulf Power Company is the lowest, is that correct?

A Of the majors and not counting Florida Public Utilities.

Q Yes. Did you say yes?

A Yes. I did.

Q I'm sorry. The percent change is the lowest?

A That's correct.

Q The complaints per 1,000 customers, I believe, is the lowest?

A For 1990, yes.

Q Yes, year-to-date. And the justified per 1,000 customers, I believe, would be second to Florida Power, if I'm reading this correctly?

A You're correct.

MR. HOLLAND: That's all I've got.

MR. BURGESS: No questions.

MR. McWHIRTER: No questions.

MAJOR ENDERS: No questions.

CHAIRMAN WILSON: Redirect?

MR. VANDIVER: None.

CHAIRMAN WILSON: Thank you very much, you may be excused.

(Witness Brown excused.)

CHAIRMAN WILSON: Move admission of Exhibit 606? Without objection, admitted into evidence.

(Exhibit No. 606 received in evidence.)

CHAIRMAN WILSON: Call your next witness.

MR. VANDIVER: Mr. Wright.

CHAIRMAN WILSON: We can see what he's been doing all day. (Pause)

MR. BURGESS: Would you give us your name and business address?

WITNESS WRIGHT: Mr. Burgess, may it please the Commission, I haven't been sworn. Do you want to do that first?

MR. BURGESS: Yes.

ROBERT SCHEFFEL WRIGHT

was called as a witness on behalf of the Citizens of the State of Florida and, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BURGESS:

Q Now that we know that you're going to tell the truth about it, would you give us your name and business address?

A Yes, my name is Robert Scheffel Wright. My business address is 501-D East Tennessee Street, Tallahassee, Florida, 32308.

Q Did you prepare prefiled testimony in this docket, file it with the Commission?

A Yes, sir, I did.

Q Do you have any corrections or amendments to make to that direct prefiled testimony?

A Yes, sir, I have a few minor corrections. I believe the reporter has been furnished a complete

clean copy reflecting these corrections.

Q Yes, sir.

A At Page 8, Line 14, after the word "Gulf's," insert the word "large."

At Page 30, Line 4 --

Q 30.

A Correct. Page 30, Line 4, after the word "other," insert the word "similar."

At Page 34, Line 7, the third word should be "affect," a-f-f-e-c-t, not "effect."

At Page 40, Line 13, strike the phrase, "all of its demand-metered," and insert the word "these."

CHAIRMAN WILSON: What line was that one?

WITNESS WRIGHT: Line 13 on Page 40.

CHAIRMAN WILSON: And strike what?

WITNESS WRIGHT: Strike the phrase, "all of its demand-metered," and insert the word "these." So it reads, "charge for these rate classes."

At Page 43, Line 6, following the word "its," insert the word "large."

Final correction is on Exhibit RSW-1, which is the next page immediately following Page 43, in the diagram in the prefiled testimony, there is an arrow drawn from the box labeled "Production" under the "Functionalization" heading to the box labeled

"Customer" under the "Classification" heading. That arrow should not be there. I thought that I had gotten it out earlier, but when I went back and looked, I saw that it was there. So in the clean copy, the arrow from "Production" to "Customer" is whited out.

Q Other than those changes, Mr. Wright, if you were asked the same questions posed in your prefiled testimony, would your testimony today be substantially the same?

A Yes, sir.

MR. BURGESS: Commissioner, we have produced for the court reporter a clean copy that reflects these changes, and we would ask that Mr. Wright's prefiled testimony be entered into the record as though read.

CHAIRMAN WILSON: Without objection, it will be so inserted into the record.

MR. BURGESS: And Mr. Wright, I believe that you also have attached a number of exhibits which have been identified with exhibit numbers. I'm not sure what they are.

WITNESS WRIGHT: Was that a request to describe them, Mr. Burgess?

MR. BURGESS: Beg your pardon?

WITNESS WRIGHT: Was that a request to describe them briefly?

MR. BURGESS: No, no.

CHAIRMAN WILSON: He's just stalling for time while he tries to identify the exhibit numbers.

MR. BURGESS: I'm afraid my copy in the pre prehearing doesn't have that, so I'm looking for some help in identifying the four exhibits.

CHAIRMAN WILSON: Do you know what the numbers assigned to those exhibits are? (Pause)

MR. VANDIVER: 350 through 353, I believe, Commissioners.

MR. BURGESS: Thank you, Rob.

(Exhibit Nos. 350 through 353 previously stipulated into the record.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 891345-EI, APPLICATION OF GULF POWER COMPANY FOR A RATE INCREASE

DIRECT TESTIMONY OF ROBERT SCHEFFEL WRIGHT

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

A: My full name is Robert Scheffel Wright. I am employed as Vice President and Principal Consultant with the consulting firm, West Park Group, Inc. The firm's business address is 501 East Tennessee Street, Suite D, Tallahassee, Florida 32308. I am also employed as Resident Economist and Special Consultant on regulatory and economic matters with the law firm of Wiggins & Villacorta, Post Office Drawer 1657, Tallahassee, Florida 32302.

Q: **Please describe your educational background.**

A: I received a B.A. degree with High Honors in Economics from the University of Florida in 1971. I received a M.A. degree in Economics from Duke University in 1973, upon passing my preliminary examinations for admission to candidacy for the Ph.D. degree. My examination fields were Environmental Economics; Industrial Organization, Regulatory, and Antitrust Economics; and Public Finance. I have also attended numerous seminars

and training sessions on electric utility regulation, cogeneration, and other regulatory subjects while I was employed by the Florida Public Service Commission In 1988, as one of the instructors of the PSC's Public Utility Regulatory Seminar presented for the Commission staff, I gave a presentation on Current Issues in Energy.

Q: Please describe your employment experience.

A: Upon leaving Duke in 1974, I accepted a position as Assistant Professor of Economics at Saint Olaf College in Northfield, Minnesota, where I taught various courses in Economics, including Industrial Organization, Environmental Economics, and Principles of Economics from 1974 through 1976. I was employed as an economist/program analyst by the Minnesota Legislative Auditor's Office from 1976 until 1979, and as an economist/analyst by the Kentucky General Assembly from 1979 to 1980. In December 1980, I accepted an analyst position with the Florida Governor's Energy Office, where my responsibilities included research, analysis, and statewide energy use forecasting. I worked in the Governor's Energy Office until March 1982, when I joined

the Research Division of the Florida Public Service Commission.

In the Research Division, most of my work related to electric utilities. I wrote several economic impact statements for proposed rules affecting electric utilities, and I participated fairly extensively in framing and drafting some of those rules. I was also the project manager and principal author of three substantial reports, Analyzing Future Values: Present Value Analysis, Benefit-Cost Analysis, and Inflation Adjustment Techniques; Rate Case Procedures at the Florida Public Service Commission; and Minimum Appliance Efficiency Standards for Florida.

I transferred to the Bureau of Electric Rates in the Commission's Electric and Gas Division in November 1984. As an Economic Analyst in the Rate Bureau from then until January 1988, my main assignments were (1) the Commission's generic cost of service docket; (2) its generic non-firm rates docket, Docket No. 830512-EU; (3) Tampa Electric Company's 1985 general rate case, Docket No. 850050-EI, in which I served as the staff's witness on cost of service and some rate design issues; (4) the self-service wheeling petition of W.R. Grace Company v.

Tampa Electric Company, Docket No. 861180-EU; and (5) the Commission's generic docket on appropriate rates for standby and supplemental service for cogenerators, Docket No. 850673-EU. I also processed tariff filings by investor-owned, municipal, and cooperative utilities, and I authored and defended numerous recommendations on tariff filings at PSC agenda conferences.

In January 1988, I was promoted to Chief of the Bureau of Electric Rates, where my responsibilities were to supervise, recruit, train, and review the work of a professional staff of five persons besides myself.

During 1987 and 1988, I served on the NARUC Task Force charged with re-writing the NARUC Electric Utility Cost Allocation Manual. I authored the first and second drafts of the chapter on Embedded Production Cost Allocation Methods before I resigned from the Commission staff. When I left, my chapter had been through a thorough review by the other members of the Task Force and had been accepted by them.

Q: **What was your next employment?**

A: I joined the law firm that is now Wiggins & Villacorta in November 1988, and we incorporated West Park Group in 1989. My responsibilities to law firm clients have included providing legal and case strategy services to cogenerators and cogeneration developers, a utility seeking to establish joint ownership of a transmission line through its territory, different parties with specific complaints regarding their electric service, and two water utilities. As a certified Class B Practitioner, I have made appearances on behalf of clients before this Commission.

My consulting engagements include (1) preparing and filing expert testimony on behalf of the City of Tallahassee, Florida, in a territorial dispute proceeding before the PSC, Docket Nos. 881602-EU and 890326-EU; (2) preparing and filing expert testimony on behalf of the Citizens of the State of Florida in Docket No. 881167-EU, the predecessor to this case; (3) providing advice on standby rates and cost of service issues to an investor-owned utility in New England; (4) providing advice and consulting services to a cogeneration developer participating in the Commission's docket to revise its cogeneration rules, Docket No. 890149-EU; (5) preparing testimony and appearing as an

expert witness on behalf of the People of the State of Michigan, through their Attorney General, in Consumers Power Company's 1989 Power Supply Cost Recovery case, Case No. U-8866R; and (6) a contract research project on energy efficiency standards for manufactured housing and home appliances, for the Governor's Energy Office of Florida.

Q: Have you previously testified in proceedings before the Florida Public Service Commission?

A: Yes. I was a witness on behalf of the Commission Staff in Tampa Electric Company's 1985 general rate case, Docket No. 850050-EI; in the rulemaking hearing on non-firm electric service and rates, Docket No. 830612-EI; and in the self-service wheeling petition of W. R. Grace Company, Docket No. 861180-EU. I submitted testimony on behalf of the City of Tallahassee in its 1989 territorial dispute with Talquin Electric Cooperative, Docket Nos. 881602-EU and 890326-EU, but that case was settled without hearings. Finally, I submitted testimony in the predecessor case to this proceeding, Docket No. 881167-EU, but the Company withdrew its petition for rate relief prior to the hearing.

DIRECT TESTIMONY OF ROBERT SCHEFFEL WRIGHT

Q: Have you testified in proceedings before other states' utility regulatory commissions?

A: Yes. I testified on behalf of the People of the State of Michigan, through their Attorney General, in Consumers Power Company's 1989 Power Supply Cost Recovery reconciliation proceeding, Case No. U-8866R.

Q: What is the purpose of your testimony in this proceeding?

A: I am testifying on behalf of the Citizens of the State of Florida to recommend that the Public Service Commission adopt the Equivalent Peaker Cost (EPC or Equivalent Peaker) method as its primary guide to cost of service allocation and rate design for Gulf Power Company's retail customer classes. I will also testify regarding proper ratemaking for Gulf's General Service rate class, proper time of use rate design, and the minimum bill provision proposed by the Company for its LP/LPT and PX/PXT rate classes.

Q: Please briefly summarize your testimony.

A: My testimony will demonstrate that, from its foundations in utility generation planning practices, the Equivalent Peaker cost allocation method tracks the "cost-causer-pays" principle more closely than any other. It results in price signals that more closely reflect cost causation, and thus it is more fair than other methods. Therefore it should be adopted by the Commission.

While I support appropriately designed "ratcheted" demand charges for certain cost elements, particularly local distribution plant and operations costs, I would urge the Commission to reject the Company's proposed minimum bill provision and instead to implement for Gulf's large demand-metered classes an appropriate local facilities demand charge calculated in the same way as that prescribed by this Commission for standby service in Docket No. 850673-EU, Generic Investigation of Standby Rates. The Company's proposal is not appropriately designed in that it may allow non-fuel energy charges and fuel charges to count towards the minimum bill amount based on the customer's contractually specified amount of local distribution capacity. If, as it appears, the provision would allow fuel and non-fuel energy charges to count toward the minimum bill, it sends improper price signals in that

for some range of consumption, the incremental or marginal cost to the customer of additional energy consumption is zero. This is anti-conservation and should not be permitted.

The Commission should require Gulf to set its General Service (GS, non-demand-metered) rates equal to its Residential Service (RS) rates. Finally, I support time-of-use rates for all customers.

Q: **What is the purpose of cost of service studies?**

A: Cost of service studies analyze the costs of providing electric service to the various classes of customers. They are in turn used by utilities and regulators to establish rates. Fair, just, and reasonable rates are those that track cost most closely. The goal of cost of service studies should thus be to reflect cost-causation, that is, the way in which the utility incurs costs or the specific considerations that utilities make in their internal decision-making processes.

Exhibit 350 (RSW-1) is a flow chart that shows the steps in cost allocation and ratemaking.

Q: How closely should regulators follow cost of service studies in setting rates?

A: In the long run, I believe that rates should be set equal to unit costs as indicated by cost studies. In the short run, rates should be set as close to unit costs as is practically possible. For reasons of rate continuity or stability, or to avoid rate shock on specific groups, utilities and regulators may find it desirable in some cases to move toward unit costs gradually.

To the degree that rates are not set at costs, subsidies exist. They may be inter-class, if classes' rates generate more or less than their allocated revenue responsibility, or they may be intra-class, as occurs when demand charges recover energy-related costs, or vice versa. Subsidies should be avoided to the maximum extent possible. In the long run, they should be avoided altogether.

Q: Please describe the Equivalent Peaker Cost allocation method.

A: This method differs from most other cost of service methods in its treatment of production plant costs. The Equivalent Peaker method classifies all of the utility's actual peaking units as demand-related and classifies, analytically, the utility's intermediate and baseload units into demand-related and energy-related components as follows: the estimated cost of peaking units with capacity equivalent to that of the utility's intermediate and baseload units is classified as demand-related and allocated on the basis of the classes' contributions to the utility's peak demands, the twelve monthly coincident peak demands in Gulf's case. The additional investment in those plants above the cost of equivalent peaking capacity is classified as energy-related and allocated on the basis of the classes' proportionate shares of Gulf's retail energy consumption, measured at the generation level.

Q: Please explain the rationale that underlies and supports this cost of service methodology.

A: The Equivalent Peaker method recognizes that electric utilities build different types of generating plants for different reasons. Peaking units are built to serve a given level of KW demand when that demand is not

expected to be of long duration. Baseload units are usually built to serve a given level of KW demand when there is also a substantial KWH energy load to be served. In some cases, baseload units are constructed to obtain energy cost savings even when the utility has adequate capacity to meet its peak demands.

More specifically, the EPC method tracks utility generation expansion practices, which generally consist of two phases. First, the utility identifies a need for additional capacity, and the timing of that need, by analyzing its reliability criteria. These may include reserve margin, loss of load probability (LOLP), loss of load hours (LOLH), or expected unserved energy (EUE). The utility will plan to add capacity when its projected peak demands cause these criteria to violate established critical values. Second, after a need for additional capacity is identified, an economic analysis is done to determine the least-cost generation expansion plan, i.e., what type of capacity to add, based on the utility's projected energy loads.

The EPC method recognizes that the additional production plant costs incurred by electric utilities above the cost of peaking units -- e.g., the additional cost of a

baseload coal unit above the cost of gas or oil fired combustion turbines -- are incurred because the KWH energy loads of the utility's customers are sufficient to justify the additional initial capital expense.

In other words, if the utility were building generating plant only to serve a brief peak demand, it would build or buy the least expensive peaking units available. However, since the utility has to serve a significant energy or KWH load, it is economically sound for it to build baseload generating units that use relatively inexpensive fuel, such as coal. The fuel cost savings realized because the plant serves a broad energy load are sufficient to justify the additional plant costs. Thus, these additional plant costs are properly classified as energy-related and allocated to rate classes according to their proportionate shares of KWH consumption.

Only the cost of equivalent peaking capacity, plus the cost of the utility's actual peaking units, is properly classified as demand-related. These demand-related production plant costs are allocated to rate classes based on their contributions to the utility's peak demands.

Q: Please explain the difference between the Equivalent Peaker method and the 12 CP and 1/13th Weighted Average Demand (12 CP and 1/13th) method.

A: The two methods differ in their treatment of production plant costs. The Equivalent Peaker method classifies as demand-related only the estimated cost to build peaking units with capacity equivalent to that of the utility's total generating plant. These demand-related costs are allocated in proportion to the classes' proportionate shares of system coincident peak demands, the twelve monthly peaks in Gulf's case. Recognizing and tracking the prudent system planning practice of determining, based on energy loads to be served, what type of unit is most economic to build after a need for additional capacity to satisfy reliability criteria is established, the EPC method classifies the remaining costs above the estimated cost of equivalent peaking capacity as energy-related. These energy-related costs are allocated to the classes according to their proportions of total jurisdictional energy consumption at the generation level, excluding plant and company use.

The 12 CP and 1/13th method, on the other hand, classifies 92.31 percent (12/13ths) of production plant as demand-related and 7.69 percent (1/13th) as energy-related. This is a judgmental approach that attempts to recognize that both peak demands and energy requirements are important in determining total production plant costs. In my opinion, the EPC method is clearly superior to the judgmental 12 CP and 1/13th method because of its analytical approach to measuring the cost effects of both peak demands and energy requirements.

Q: How is this different from the cost allocation methods that have historically been used by the Florida Public Service Commission?

A: Basically, the EPC method classifies production plant costs into demand-related and energy-related components using an analytical approach grounded in the system planning considerations that drive the utility's plant investment decisions, as compared to the various judgmental approaches followed by the PSC in most cases in the past. As described above, the first step is to estimate the cost of building peaking units of equivalent generating capacity to that of the utility's intermediate and baseload units. This estimated cost

of peaking units is classified as demand-related and allocated according to the classes' proportionate shares of significant peak demands. The additional amount invested in the utility's generating plants is classified as energy-related and allocated according to the classes' proportionate shares of energy consumption, measured at the generation level.

The Public Service Commission has historically used a variety of cost allocation methodologies, ranging from heavily demand-weighted methods all the way to full implementation of the Equivalent Peaker method. To the best of my knowledge, through most of the 1970s, the Commission relied on cost allocation studies using a peak-and-average demand approach; these studies allocated production plant costs to the rate classes according to their contributions to the utility's jurisdictional peak demand and jurisdictional average demand. These methods generally resulted in allocations weighted about two-thirds to peak demand responsibility and one-third to energy or average demand. (Because average demand is simply total energy consumption divided by the number of hours in the year, the allocation factors calculated using either class average demand or class energy consumption are identical.)

In the late 1970s and early 1980s, the Commission generally used a more heavily demand-weighted method, the 12 CP and 1/13th weighted average demand method. By this method, 12/13ths (92.31 percent) of production plant costs were classified as demand-related and allocated to rate classes according to their percentage shares of the utility's twelve monthly jurisdictional peak demands. The remaining 1/13th (7.69 percent) was classified as energy-related and allocated to the classes according to their percentage shares of jurisdictional energy consumption.

By 1983, the Commission had begun to re-think its love toward demand-weighted cost allocation methods. At least three of the state's four large investor-owned utilities also proposed and supported cost of service methods that incorporated heavier weighting of class energy consumption in allocating production plant costs. In the so-called "St. Lucie II Mini-Rate Case" of Florida Power & Light Company, the second phase of Docket No. 820097-EI, the Commission classified the fixed revenue requirements of FPL's newest nuclear generating unit into an energy-related component, equal to the annual fuel expense savings that the plant was

projected to provide, and a demand-related component equal to the balance. By this approach, $179,000,000 (75 percent) of the plant's revenue requirements was classified as energy-related and allocated to the classes on the basis of their energy consumption, while the remaining $58,816,000 (25 percent) was allocated so as to move the classes closer to parity in rate of return. In FPL's next (and most recent) general rate case, Docket No. 830465-EI, the Commission again addressed the energy-relatedness of the Company's investment in St. Lucie II. This time, the Commission classified St. Lucie II by an equivalent peaker approach, with the result that 78 percent of the plant was classified as energy-related and 22 percent was classified as demand-related. In its Order No. 13537, the Commission went on to note its intent to consider classifying FPL's three other nuclear generating units by the same equivalent peaker approach in future rate cases. Order No. 13537 at 60.

In Tampa Electric Company's 1983 general rate case, Docket No. 830012-EI, the Company proposed a cost method that classified a significant portion of the Company's CWIP investment in its Big Bend 4 baseload generating unit, then under construction, as energy-related. The

Commission adopted this proposal, with the overall result that significantly more of the Company's production plant revenue requirements was classified as energy-related and allocated to the classes on the basis of their energy use than would have been so allocated using the 12 CP and 1/13th approach.

In Tampa Electric's 1985 general rate case, Docket No. 850050-EI, several cost studies were put on the table: (1) a pure peak demand (7 CP) study sponsored by industrial intervenors, which would have allocated 100 percent of production plant costs on the basis of the classes' peak demand responsibility; (2) the Company's study, which utilized a 12 CP and 1/13th approach with certain pollution control and fuel handling equipment classified as energy-related, resulting in an overall classification of about 34 percent of production plant as energy-related and 66 percent demand-related; (3) an EPC study, which classified about 75 percent of production plant as energy-related and 25 percent as demand-related; and (4) a production stacking method that classified about 79 percent as energy-related and 21 percent as demand-related. The Commission adopted the Equivalent Peaker Cost study as its primary guide to class cost allocation and rate design.

DIRECT TESTIMONY OF ROBERT SCHEFFEL WRIGHT

Q: **Are you sponsoring any cost of service studies into evidence in this case?**

A: Yes, at this time I am sponsoring into evidence an EPC study prepared by Gulf's Witness Michael T. O'Sheasy in response to Interrogatory No. 1, Staff's First Set, and a so-called "Refined" EPC study prepared by Mr. O'Sheasy in response to Interrogatory No. 2, Staff's First Set. These are identified as one document, Exhibit 351 (RSW-2). Additionally, I intend to sponsor enhanced, revised versions of these two studies into evidence as soon as possible. The revisions, which improve the studies but which should not produce dramatic changes in their results, are addressed later in my testimony.

Q: **Please describe the results of the Basic Equivalent Peaker Cost method for Gulf Power Company, and compare them to the 12 CP and 1/13th Weighted Average Demand method shown in MFR Schedule E-1.**

A: Exhibit 352 (RSW-3), consisting of 4 pages, presents a comparison of net operating income and class rates of return at present rates for the 12 CP and 1/13th Weighted Average Demand method, the basic EPC method,

and the Refined Equivalent Peaker Cost method, which is discussed later in my testimony. To summarize briefly, this side-by-side comparison shows that the 12 CP and 1/13th method allocates more costs to the RS, GS, and SS rate classes, as reflected by their lower rates of return and lower NOI at present rates, and less to the other classes than the Basic EPC method. For the RS, GS, PXT, and OS classes, the Refined EPC yields results between those of the 12 CP and 1/13th method and the Basic EPC method. However, the GSD class is allocated more cost responsibility, reflected by less NOI and a lower rate of return, using the Refined EPC than under either of the other studies, while the LP/LPT, OS-III, and SS classes are allocated less cost responsibility by the Refined EPC study than under either of the other studies. While these results are somewhat counter-intuitive, they appear to result from different relationships between demands in the 12 monthly coincident peaks and those in the company's 1,430 highest-demand hours.

Q: How would fuel expense be treated in ratemaking using these cost of service principles?

A: The EPC method does not create a need to alter the Commission's current average-cost-based ratemaking treatment of fuel expense.

Q: The Equivalent Peaker Cost method would shift some production plant cost responsibility away from low-load factor customers and classes and toward high-load factor customers and classes, would it not?

A: Yes.

Q: Yet you are not advocating any accompanying change in the Commission's ratemaking procedure for fuel cost recovery, is that correct?

A: Yes.

Q: Why not?

A: Because no such change in fuel cost recovery is necessary. The Equivalent Peaker method actually moves the overall relationship between production plant cost allocation, fuel cost allocation, and fuel cost recovery toward a matched, equitable relationship.

A fair apportionment of baseload plant costs and baseload-generated energy, which is less expensive than peaker-generated energy, would be one by which each class's share of baseload plant cost responsibility--or baseload plant paid for -- would approximate the share of inexpensive baseload energy received at the baseload fuel cost. Since average-cost pricing of fuel implies that each class gets a share of baseload energy proportional to its share of total energy consumption, we need only look at each class's share of total energy use to identify how much baseload energy it received at the baseload price. This is particularly obvious in Gulf's case, since 99.8 percent of Gulf's total energy is generated from coal (1990 projected).

Exhibit 353 (RSW-4) shows that the residential (RS) class should receive in 1989 about 44 percent of the Company's baseload coal-fired electricity. By the EPC method, residential customers would pay for about 43 percent of Gulf's baseload plants. By the Refined EPC method, they would pay for nearly 51 percent, and by the 12 CP and 1/13th method, they would pay for nearly 53 percent. On the other hand, while Gulf's LP and LPT rate classes should receive about 19 percent of the Company's baseload coal-fired energy, by the 12 CP &

1/13th method, they would pay for only 15.56 percent of the baseload plants, and by the Refined EPC method, they would pay for even less, 15.49 percent. By the basic EPC method, however, they would pay for 17.25 percent. In summary, the closest match between baseload plant cost responsibility and baseload fuel received is achieved by the basic Equivalent Peaker method. This holds true across all three cost studies for all classes except the GSD class, for which the closest match is provided by the Refined EPC study.

Q: Doesn't your position really reduce to a simple equity argument, that those who use or benefit from baseload plants should pay for them?

A: No. Although this is a sound argument, it is not the foundation for my position. My position is based on the "cost-causer-pays" principle rather than on a "benefits received" principle. If I desired only to promote simple economic equity, I would advocate simply allocating the full cost of baseload units on energy, because that's the only way of getting the baseload plant cost responsibility to match up with the fuel savings benefits. In contrast to this simple equity approach, the EPC method recognizes that all customers

and classes do contribute to the need to build capacity necessary to serve peak demands, and it allocates the cost of peaking capacity to them accordingly. Although the EPC method is frequently attacked for allegedly shifting cost responsibility onto industrial and commercial classes, applying the EPC method could in fact reduce the rates of industrial and commercial customer classes in cases where a utility's industrial rates had historically been set high in order to hold down residential rates (and, of course, in cases where applying the EPC method to the classes' usage characteristics produces such results).

Additionally, it is because of the "cost-causer-pays" principle -- i.e., because it is appropriate to recognize the role of peak demands in causing the utility to incur some production plant costs, and because baseload units do serve to meet peak demands--that I find it acceptable to live with the "fuel inequity" or "fuel mis-match" that remains even using the Equivalent Peaker method.

Q: Do you believe that the Equivalent Peaker method sends an appropriate price signal relative to the long run

marginal or incremental plant costs associated with serving off-peak load?

A: Yes. I believe that, because of the way utilities determine what type of plant to build, and therefore the cost of additional generating plant, there may well be a long run marginal generating plant cost of off-peak energy use. This would be the additional cost that a utility would incur to build a baseload plant to take advantage of fuel savings available from running the plant in off-peak as well as on-peak periods. As utilities plan, all KWH loads are considered in determining what type of plant is to be built. In some cases, utilities have even found it economically desirable to build a baseload coal plant to obtain energy cost savings in serving broad on-peak and off-peak loads, even when no additional capacity was required for reliability purposes. Rates based on an Equivalent Peaker Cost method will embody an appropriate reflection of this cost. (These rates will not equal the actual incremental cost of new baseload plant above the cost of new peaking plant, which could be $.015/KWH to $.035/KWH, because the actual rates will be based on embedded costs. These rates will, however, provide an

appropriate price signal reflecting the potential real incremental cost of off-peak use.)

Q: Have you reviewed the so-called Refined Equivalent Peaker Cost (REPC) study filed by Gulf Power in response to the Commission Staff's Interrogatory No. 2?

A: Yes.

Q: Do you believe that the Refined EPC study is superior to the basic EPC study method that you have described and supported above?

A: No, I do not.

Q: Please explain.

A: The Refined Equivalent Peaker method closely follows the basic EPC method except that using the Refined EPC method, the energy-related component of production plant rate base is allocated to the classes according to their shares of energy consumption in the highest-demand hours under the utility's load duration curve. The number of hours is determined according to a break-even cost analysis between building a peaker and building a

baseload unit. While this approach has some appeal, I cannot give the method my full support for the following reasons:

1. It does not track utilities' actual generation expansion planning processes. Specifically, it ignores the utility's total energy loads which are included as an input to the economic analysis phase of the generation expansion planning process.

2. It does not recognize potential long run marginal or incremental plant costs of off-peak energy use.

3. It results in a lesser degree of "fuel cost matching", or less fuel equity than the basic EPC study. This is particularly pronounced in the case of Gulf Power Company, because some 99.8 percent of Gulf's energy sales are generated from coal-fired generating plants. As shown in Exhibit 353 (RSW-4), applying the Refined EPC method would have Gulf's LP/LPT and PXT classes pay for only 23.64 percent of the Company's baseload coal plants while receiving 29.87 percent of their generation. On the other hand, using the basic EPC method, these

classes would pay for 26.52 percent of the Company's baseload coal plants while still receiving 29.87 percent of these units' generation.

4. Using the highest-demand hours under the load duration curve is not appropriate. In the first place, if the unit were expected to dispatch in any number of hours greater than the break-even number of hours, then, by the break-even hypothesis, it would be built, regardless whether these hours were in the high-demand end or the low-demand end of the load duration curve. Secondly, for technical reasons, a utility would almost surely not build a baseload plant to operate only in the highest demand hours of the year. This is because these hours generally fall within daily peak periods, of a few hours per day, and utilities strenuously endeavor to avoid frequent cycling of baseload units in order to avoid wear on boiler components that results from frequent heating and cooling.

5. Adopting this approach would place the Commission in a clearly and uncomfortably inconsistent position with respect to production plant cost allocation and the pricing of

cogeneration power purchased by utilities. If the Commission determines that all production plant costs are attributable to the highest 1,430 hours (or 1,500 hours or any other similar number of hours) under the load duration curve, then consistency would dictate that Qualifying Facilities should receive the full baseload revenue requirement if they generate for the same period. I do not believe that this would be appropriate, because QFs should be paid baseload revenue requirements only for providing baseload-type service, and I most strongly doubt that either this Commission or Florida's electric utilities would support such a proposal.

Q: Does the Refined EPC method represent a reasonable compromise between the basic EPC method and the 12 CP and 1/13th Weighted Average Demand method supported by the Company?

A: It may, but only if one is looking for a compromise. The Refined EPC produces results that generally lie within or not far outside the range defined by the results of the basic EPC method and the 12 CP and 1/13th Weighted Average Demand method. However, as I

discussed earlier, I believe the Basic EPC is superior to the Refined EPC (1) because it more closely tracks actual generation expansion planning considerations, and (2) because it more closely matches baseload plant cost responsibility with the inexpensive coal-fired power which predominates Gulf's actual energy production. Where, as here, an analytically correct approach is available, compromises are inappropriate.

Additionally, while compromises may represent acceptable means of smoothing transitions from one cost of service methodology to a better one, this function is probably fulfilled at least as well by the Commission's traditional "transition rules of thumb" that limit the increases that any class can receive relative to other classes.

Q: If the Commission determines that using a Refined EPC approach is appropriate in this case, should any modifications be made to the study shown in your Exhibit 351 (RSW-2)?

A: Yes. If the Commission determines that a Refined EPC approach should be used to guide cost allocation in this case, then the Commission should at least require the

use of a study that uses the classes' relative shares of energy consumption in the Company's actual on-peak hours, not the energy use in the highest-demand hours under the load duration curve, to allocate the energy-related component of production plant. This would at least tend to capture some of the effects that off-peak energy consumption has on the Company's investment decisions and also to reflect the fact that utilities would not build baseload plants for cycling duty only during peak demand hours.

Q: What modifications or corrections need to be made to the EPC and REPC studies filed by the Company in response to Staff's Interrogatories No. 1 and No. 2?

A: Not all primary voltage conductor, subtransmission voltage conductor, and transmission voltage conductor serve common functions. Some function as dedicated facilities. Yet, they are allocated on the basis of all classes' NCPs. The company has allocated all of Account 369 - Services, which includes secondary service drops, to secondary voltage-level customers. To be consistent, the company should estimate the rate base value of primary and higher voltage-level conductor that functions as dedicated distribution facilities, or as

higher voltage service drops, and directly assign these estimated amounts to the classes that include the customers who are served by these facilities.

Another important revision is that fuel inventory should be classified as energy-related; the Company's study has classified fuel inventory as demand-related. The re-classification of fuel inventory is not a feature unique to the Equivalent Peaker Cost method; this is a correction that should be made even if the Commission were to adopt the 12 CP and 1/13th Weighted Average Demand method or any other method, simply because fuel is energy-related and allowable fuel inventory is a function of projected generation.

Q: In your opinion, is there a generic problem with the cost of service methods that allocate most or all production plant costs on the basis of peak demands?

A. Yes. The problem is that peak demand responsibility methods assume that all production plant costs are incurred to serve peak demand. While it is true that all plant has the capacity to serve instantaneous peak demands in addition to energy loads, allocating all costs on the basis of class peak demands simply ignores

the fact that plant costs are incurred not only in consideration of meeting peak demands but also because of the energy loads to be served. Peak demands determine the timing and amount of capacity additions; energy requirements determine the type, and therefore the cost, of capacity to be added. Energy requirements can even affect the timing of a baseload plant addition: by yielding fuel cost savings realized by displacing existing oil-fired capacity, a utility may find it economic to add a baseload coal unit several years before its capacity is needed for reliability purposes. In such a case, it would be technically correct to classify all of that plant's investment as energy-related for the period before its capacity was actually needed for reliability.

Q: Why is the Basic Equivalent Peaker Cost method superior to the other methods proposed in this case?

A: As I stated at the outset of my testimony, the purpose of cost of service analyses is to allocate costs to the various customer classes according to the way in which the utility incurs them, or according to the utility's considerations in incurring costs. This is turn enables utilities and regulators to set rates in accordance with

how the underlying costs were incurred. For production plant costs, the EPC method more accurately tracks and reflects the utility's own decision-making processes than any other study in this case. It comes closer than any other to accurately reflecting the utility's considerations (1) in adding capacity to meet peak demands, and subsequently (2) in determining what type of capacity to add, and therefore how much it will spend.

Q. **Mr. Wright, do you support time of use rates for all customers?**

A: Yes. I think that everyone familiar with the subject recognizes that costs vary according to time of day, and perhaps the time of year, when electricity is generated and consumed. I believe that time of use rates can be designed that more accurately reflect cost of service than do standard or non-time-differentiated rates. Because implementing rates that accurately reflect costs should be the goal of ratemaking, I support time of use rates.

Q: **Please describe the implications of the Equivalent Peaker Cost method for time of use rate design.**

A: For ratemaking purposes, I would recommend that the non-fuel energy charge in both the on-peak and off-peak periods be set equal to the energy unit cost for each class. This would include the cost of production plant classified as energy-related plus energy-related operations and maintenance expenses. If it were possible to directly assign the non-fuel variable operations and maintenance expenses associated with peaking units to the on-peak energy charge, that would be desirable. Additionally, to the degree that true differences between on-peak and off-peak variable production operation and maintenance expenses can be identified and calculated, it would be desirable to assign them to the on-peak and off-peak energy charges accordingly. However, I believe that these refinements are probably so small as to be non-essential, if indeed they are measurable at all. The maximum demand charge, applicable to the customer's highest measured demand in the current month or a preceding "ratchet period" of one to two years, regardless whether it occurred on-peak or off-peak, would be an amount sufficient to recover the cost of local distribution facilities, including O&M costs, plus possibly some component of non-local distribution costs, e.g., substations. The on-peak

demand charge would be set to recover the revenue requirement for demand-related production and transmission costs, plus any distribution costs not recovered through the maximum demand charge. Appropriate time-of-use rates should also include a cost-based customer charge and time-differentiated fuel charges.

Because residential and general service, non-demand customers do not pay demand charges, their demand-related revenue requirements would be recovered through the on-peak non-fuel energy charge for these classes. The customer charge would be the same as that for non-TOU members of the same class, adjusted to reflect higher costs of metering and billing, as appropriate.

Q: In your opinion, would the higher metering costs associated with time-of-use rates be cost-effective?

A: Possibly. The evidence with which I am familiar seems to indicate that for relatively slight differentials between on-peak and off-peak rates, the effects on peak demand reduction are correspondingly slight. On the other hand, because time-differentiating meters are relatively inexpensive, no more than $200 for watt-

hour meters which would be used for the residential and small commercial classes where the effects of time-of-use rates would be the least, it would only take a reduction of one-half to two-thirds of a diversified kW per customer to make the investment cost-effective.

Q: How should rates be set for Gulf's General Service (GS) rate class?

A: The GS rates should be set equal to the Company's RS rates. I believe that Gulf's GS rates got off the proper track several years ago due to problems with load research estimating procedures, and it is past time to rectify the inequitable situation that presently exists. Gulf itself proposed setting the RS and GS rates equal in its 1984 general rate base.

Cost of service studies almost invariably show that it costs no more, and frequently less, to serve the GS class than it costs to serve the RS class, on a unit cost basis. For reasons of administrative efficiency, the Commission has wisely supported a policy of setting the GS and RS rates equal for other utilities in the state rather than attempting to set the GS rates at unit cost.

I recommend that the Commission follow this policy in this case, even though it means that the GS class will receive a decrease. In my opinion, the decrease is long overdue.

Q: Have you reviewed the minimum bill provision proposed by Gulf in its rate schedules?

A: Yes, I have.

Q: Do you believe that this proposal is sound?

A: No.

Q: Please explain.

A: By the language proposed by the Company in its response to Interrogatory No. 48, Staff's Third Set, the minimum bill provision of Gulf's LP/LPT and PX/PXT tariffs appears to permit non-fuel energy charges and fuel charges to count toward satisfying the customer's minimum bill under some circumstances. This is contrary to the Commission's energy conservation policies in that for some range of consumption, it may send a signal

to customers that their incremental cost for additional energy consumption is zero. Considering a simplified example, if a customer is faced with a minimum bill of $5,000, and he is allowed to count all charges, including fuel and non-fuel energy charges, towards the minimum, the real incremental cost to the customer of using the first $5,000 worth of energy is zero.

Q: **Do you have an alternate proposal?**

A: Yes. I would recommend that the Commission direct Gulf to implement a local facilities or distribution demand charge for these rate classes calculated in exactly the same way as that prescribed by the Commission for standby customers in Docket No. 850673-EU. That charge is based on each class's distribution unit cost, calculated using 100 percent ratcheted billing demand, and is applied to the customer's highest measured demand during the current month or in a specified period preceding the current billing month; the "ratchet period" for standby rates is generally two years.

This rate design assures that customers pay more

directly the costs of maintaining the distribution plant and capacity necessary to serve their maximum demands.

Q. **Please summarize your testimony.**

A: Despite the thousands of steps and individual calculations involved, cost of service allocation is not conceptually difficult. Utilities and regulators should strive to allocate cost responsibility to the classes so as to track the considerations and decisions that determine how costs are incurred. Of the cost of service allocation methods proposed in this case, the Equivalent Peaker method is the best in this regard: it assigns peak-demand-related production plant costs to classes on the basis of their contributions to peak demands, and it assigns the additional plant costs incurred because of energy loads to be served on the basis of the classes' energy use. In so doing, it reflects cost causation more accurately and more fairly than do the other studies in this case.

Additionally, it results in a fairer apportionment of the additional costs of building a baseload plant, as opposed to a peaker, in relation to the classes' shares of cheap baseload energy received.

Time of use rates for demand-metered classes should be designed to include (1) an appropriate cost-based customer charge, (2) a non-fuel energy charge set equal to the respective class energy unit costs for both on-peak and off-peak energy use, (3) an on-peak demand charge designed to recover each class's demand-related production and bulk transmission revenue responsibility, (4) a maximum demand charge designed to recover the costs of local facilities, plus appropriate non-local distribution facilities, applied to the customer's maximum demand during the past one to two years, and (5) time-differentiated on-peak and off-peak fuel charges. TOU rates for non-demand-metered customers should include (1) a customer charge, (2) an off-peak non-fuel energy charge equal to class energy unit cost, (3) an on-peak non-fuel energy charge equal to the class energy unit cost plus the class's demand-related production, transmission and distribution cost responsibility expressed on a cents-per-on-peak-KWH basis, and (4) time differentiated fuel charges.

To have rates that more closely track costs yet are administratively efficient and manageable, Gulf's

general service non-demand (GS) rates should be set equal to the company's RS rates.

The Commission should require Gulf to implement a local facilities demand charge (or distribution demand charge) for its large demand-metered classes. This charge should be calculated in the same way as the local facilities charge for standby customers prescribed by this Commission in Docket No 850673-EU.

Q: Does this conclude your direct testimony?

A. Yes, it does.

C:\gulftest

Q (By Mr. Burgess) Mr. Wright, have you prepared a summary of your direct testimony?

A Yes, sir.

Q Would you please deliver that summary to the Commission?

A Yes, sir. Cost of service studies allocate costs incurred by the electric utility to rate classes, and they should be used to guide rate design. To the extent possible, cost of service studies should reflect cost causation factors that determine utility's cost incurrence decisions. It's my testimony that the equivalent peaker method or basic equivalent peaker method, as it is specifically denominated, tracks the cost-causing factors that determine electric utility's spending decisions regarding production plant investment, better than any other method in this case.

The equivalent peaker method closely tracks the two-stage process of electric utility generation expansion planning. The method recognizes that reliability index values, which achieve critical magnitude in a number of peak hours, drive the Utility to add capacity, and that energy loads incorporated into the economic analysis component of generation explansion planning determine the type of plant and therefore how costly a plant that the electric utility

will add once a need for additional capacity and the timing of that need have been identified.

The peaker method reflects this process first by classifying the cost of peakers, plus the cost of peaking capacity equivalent to that of the Utility's intermediate and baseload units as demand related, and by allocating them on the basis of an appropriate demand, peak demand allocator.

It secondly tracks the process by classifying the extra costs incurred by the Utility to build intermediate and baseload plants, which decisions are driven by the economic analysis component of system planning as energy related and allocationg them to the classes according to their respective shares of the Utility's energy loads.

Pure demand classification methods fail to accurately reflect the factors that determine the electric utility's planning decisions. Specifically, they fail completely to recognize the important role of energy loads in determining what type of and therefore how costly plant the utility builds.

The 12 CP and 1/13th method, while it attempts to address the role of energy in generation expansion planning, is judgmental. It basically adds a thirteenth number to 12 other numbers and understates

the true role of energy in determining generation expansion planning decisions.

The refined equivalent peaker Method, while it has some intuitive appeal, is incorrect for several reasons. It does not track actual generation expansion planning decision processes as well as the basic equivalent peaker method does. Utilities conduct the economic analysis component of generation planning based on serving all the loads in all the years of the expansion studies on a system basis, not on the basis of loads to be served in some number of hours under the high-use end of the load duration curve.

The refined equivalent peaker method does not recognize potential long-run marginal or incremental plant costs of off-peak energy use. With one very slight exception in Gulf's case, the refined equivalent peaker method results in a lesser degree of fuel cost equity or fuel cost matching or fuel symmetry than does the basic equivalent peaker method.

Fourth, using the high demand hours under the low duration curve is not appropriate and it ignores realistic cases where off-peak use can cause the Utility to build baseload plant. It fails to recognize that utilities generally will not build a baseload unit to run only in 1430 or 1500 or 1600 hours a year.

Finally, adopting a refined Equivalent Peaker approach would place the Commission in an uncomfortable position of having adopted conflicting judgments on the costs caused by and avoided by energy loads. If you adopt the refined equivalent peaker method, it's explicting adopting the position that usage under the high end of the load duration curve causes the Utility to build a baseload unit. Logically, if usage in these hours, 1430 or 1500, or whatever similar number of hours are indicated, causes the Utility to build a baseload unit, then power provided during these same hours would avoid that unit.

I believe this indicates a conflict in cross principles that would be applied to cost of service analysis and that which is applied to the evaluation of QF power.

I don't believe that this Commission, nor Florida's electric utilities, are ready to pay baseload revenue requirements to QFs or IPPs for power delivered only during 1500 peak hours a year, nor would I advise the Commission to do so.

Having said all that, if the Commission wants to use a refined equivalent peaker method, it should at least use the class shares of energy use in the Company's actual on-peak hours as the energy allocator,

and by actual on-peak hours, I mean those hours that are within the period designated as on peak for time-of-use rate purposes. This will capture some of the contributions of off-peak use to decisions to build baseload units and would also help to reflect the fact that utilities will not build baseload units for cycling duty during high-use hours only. It doesn't go far enough because the actual on-peak periods only include about 25% of the hours in the year as opposed to the minimum of around of 40% that a baseload unit would actually be run. But it's a lot better than the totally unrealistic 16% of the hours indicated and assumed by the refined equivalent peaker method and as reflected by Mr. O'Sheasy's break-even analysis for Gulf.

My testimony addresses the issue of local facilities' charges and minimum bill provisions. I am concerned somewhat about the potential application of the Company's proposed minimum bill provisions because they would appear, based on my reading, to permit nonfuel energy charges and fuel charges to count toward the minimum bill amount applicable under the rate.

I don't mean any prejudice here, but I'm going to mention something about Mr. Haskins' testimony in rebuttal. He's testified in rebuttal that the

Company would not count fuel and nonfuel energy charges toward customers' minimum bills under the Company's proposal. Assuming this correct, reduces my concern, but at the bottom line, I don't see any justification for continuing to treat stand-by customers any differently than full requirement customers when it comes to rate design and cost recovery for local distribution facilities. I believe the stand-by rate design, local facilities and distribution demand charge is most sound in this regard, at least for Gulf's large demand meter classes.

I support time-of-use rates for all customers, and, yes, I'll bite the bullet; I do mean that I support mandatory time-of-use rates for all customers because they more accurately reflect cost than do non time-of-use rates.

COMMISSIONER GUNTER: Slow down just a little bit for the court reporter. She's having to hustle to keep up with you.

WITNESS WRIGHT: Thank you, Commissioner Gunter.

I offer a proposal for time-of-use rate design that would recover peak demand related cost through on-peak demand, and where applicable, nonfuel energy charges and energy-related costs from all energy

consumption, and that would recover local distribution costs via appropriately designed maximum demand or distribution demand or local facilities' charges.

Finally, my direct testimony addressed the issue of proper rate design for Gulf's general rate service class. I'm very pleased and feel good that all parties in the case have stipulated to adopt the Citizen's recommendation that general service rates for Gulf be set equal to their RS rates.

Q (By Mr. Burgess) Does that conclude your summary, Mr. Wright?

A Yes, sir.

MR. BURGESS: Commissioners, we tender the witness for cross examination.

WITNESS WRIGHT: Gulf Power in a earlier case it also recommended GS rates being set equal to RS. Somehow that didn't happen. I'm glad it happened now.

CROSS EXAMINATION

BY MR. McWHIRTER:

Q Mr. Wright, as I understand it you're presently in law school?

A Yes, sir.

Q Have you yet taken the course in evidence?

A No, sir I haven't. That's generally part of the second year curriculum at Florida State.

Q When you get to the course in evidence they'll talk about fact witnesses and opinion witnesses. And as I understand it you're offering an opinion here as to things that are not readily perceptible to the average man in the street as a matter of fact, is that correct? A fact witness would be somebody who observed a collision at an intersection and he tells what he saw. An opinion witness formulates an opinion to help people derive their ultimate conclusion that they're trying to seek with respect to certain issues. Are you an opinion witness or a fact witness?

MR. BURGESS: Are you asking for a legal conclusion from this witness, Mr. McWhirter?

MR. McWHIRTER: I'm trying to figure out what he is.

COMMISSIONER GUNTER: He's a Class B practitioner. He could probably offer both, couldn't he?

Q (By Mr. McWhirter) Sometimes opinion witnesses are called expert witnesses. Would you classify yourself as an expert witness, perhaps?

A Mr. McWhirter, I think it's fair to say that I hold myself out as an expert witness on certain areas within the overall area of cost of service analysis and rate design. I think, based on what I know, and I have

heard the expressions "fact witness" and "opinion witness," before and certainly the expression "expert witness," I think your characterization is generally correct that my testimony involves expert opinion as to proper policies and practices for the Commission to adopt. As to whether I'm a fact witness, on some cases I may be in that I can point to certain facts and factual examples that support --

Q Support your opinion.

A Support my opinion.

COMMISSIONER BEARD: Was that statement you just made factual or was that an opinion?

WITNESS WRIGHT: Well, since it's a statement about my testimony and my knowledge, I would hold that out to be a fact, Commissioner Beard.

COMMISSIONER EASLEY: He went towards 101. (Laughter)

Q (By Mr. McWhirter) Typically, Mr. Wright, when you have an expert witness, such as yourself, who is going to offer an opinion upon which the Commission should base its decision, he has some peculiar knowledge in a specialized field that is not generally held by the persons who are going to make the ultimate decision. Did I understand you to say that you're going to offer expert opinion evidence on cost of

service methodology and rate design?

A I think that's fair, yes, sir.

Q Now, in order to do that, then you must be skilled through your educational background or from your training or from certain other knowledge that shows that you know more than the ordinary man in the street about these fields. And I'd like to go through your very ample and excellent credentials and ask you which of those credentials give you the expert training that you need in order to offer opinion evidence in connection with cost of service and rate design.

At the University of Florida you got a degree with high honors in economics. Did the courses -- and then you went on for a PhD. Did the courses in environmental economics, industrial organization, regulatory and antitrust economics and public finance deal with the subjects of the cost of service studies for electric utilities or rate design for electric utilities?

A Generally not. The courses in regulatory economics did deal with revenue requirements determinations and ratemaking policies for some industries.

Q All right, sir.

A The courses in environmental economics

exposed me to a lot of cost considerations to which electric utilities are subject, but the environmental economic courses, per se, did not good into cost allocation and rate design well with the exception that some of them did consider peak load pricing.

Q Environmental concepts are like peak load pricing, is that what you said?

A I think what I said was that my studies in the field of environmental economics did include studies of peak load pricing, which is a rate design technique that was, and still is, thought to promote optimal consumption decision makings by accurately reflecting cost differences between on-peak energy consumption and off-peak energy consumption. So to some extent my work in environmental economics did address that area.

Q While you were at the Commission you had training sessions on cogeneration, then you were an instructor in a regulatory seminar on the presentation of current issues in energy.

I perceive that when you were an instructor and when you dealt with cogeneration in some fashion, those dealt with the rate design and cost of service methodology, those courses?

A I don't think that the presentation on

current issues and energy covered cost of service analysis. It did cover rate design to some extent. I recall that three of the specific topics covered in the presentation were interruptible or non-firm electric service, standby rate design for cogenerators and retention rates or cogeneration deferral rates as they're sometimes called. They are obviously underpinned by a cost of service analysis, but I don't think my specific instruction session dealt with cost of service issues.

Q All right, sir. When you left Duke you became an Assistant Professor of Economics at St. Olaf College in Northfield, Minnesota, where you taught various courses in economics. I would suspect as a new professor you were teaching Economics 101 and things like that, is that correct? You say Industrial Organization, Environmental Economics, and Principles of Economics.

A Yes, sir. I taught courses specifically entitled "Industrial Organization", "Environmental Economics" "Principles of Economics" and "Urban Economics." I also taught a variety of seminars in theory and current topics and things like that.

Q Did your studies in preparation for those courses entail utility cost of service techniques or

rate design?

A No, sir.

Q Now, then, you went with the Minnesota Legislative Auditor's Office from 1976 to 1979. Did the Legislative Auditor get into those areas in Minnesota?

A We didn't get into electric utility cost of service in rate design. However, one of the largest projects that I worked on was a project in regulatory economics and finance involving cost analysis and rate design for nursing homes that were subject to state regulation as to the allowable rates charged to Medicaid patients. Basically, the approach of determining revenue requirements, thence determining rates is virtually identical to the same regulatory approach undertaken in a electric utility regulation.

COMMISSIONER BEARD: Counselor, if I might, real quick. This is a fasinating tour of "This is Your Life, Schef Wright," but perhaps, given that I don't have anything to do tonight, and I'm really enjoying this, pernaps we could ask him what parts of his career would lend itself to this, and we might bypass some of this for another more pleasurable time.

COMMISSIONER GUNTER: The only thing that was

concerning me -- I was waiting until you got to about the banking seminar that was held in Northfield, Minnesota, wasn't it?

MR. McWHIRTER: Jesse James on his way in?

COMMISSIONER GUNTER: Yes, I was wondering if you were going to get into that. (Laughter)

MR. McWHIRTER: You're too young for that.

WITNESS WRIGHT: They still have "Jesse James Days." You can still see the bullet holes in the bank.

CHAIRMAN WILSON: It wasn't an S&L, was it?

WITNESS WRIGHT: Well, I'm not sure they had S&Ls sir. I'm sure it was a bank; Northfield National, I believe.

MR. McWHIRTER: I could ask him the ultimate question, Commissioner Beard, but I think it might put it somewhat out of context and I'm almost there, so if you don't mind, I'd like to --

CHAIRMAN WILSON: Go ahead.

COMMISSIONER BEARD: We'll be here Saturday and Sunday together.

MR. McWHIRTER: -- going through with it.

Q (By Mr. McWhirter) From Minnesota, after the Northfield bank job, you went to the Kentucky General Assembly as an Economist Analyst, I guess. Did you deal with the same kinds of things there you had in

Minnesota?

A Generally, I dealt with the same kind of things. They were generally program evaluation studies, economic and financial studies. It was not anything specific dealing with electric utility, cost of service and rate design in my work for the Kentucky General Assembly.

Q Then you came to Florida with the Governor's Energy Office, and you did work on the Statewide Energy Use and Forecasting. As I recall, the Governor's Energy Office was a proponent of cogeneration, is that correct? Were you involved in any of those efforts to propose and promote cogeneration?

A I was not directly involved in any efforts to propose or promote cogeneration. I was in the Data and Research Section within the Governor's Energy Office. There were several other conservation -- there were several other units, operational functional units within the Energy Office, one of which I think was cogeneration; another of which was schools and hospitals conservation; Another of which was residential conservation and another of which was commercial and industrial conservation.

Q Did they deal with cost of service and rate design in any fashion?

A Not with cost of service and rate design as the terms of art that we use them here. It dealt with utility costs, but not as terms of art as we use them here.

Q You came to the Public Service Commission and you went to the Research Department where you worked on analyzing future values, present value analyses, cost/benefit analyses and inflation adjustment techniques. Are those related to cost of service or rate design?

A Not directly. They're related to utility costs, surely, and they provide a sound basis for understanding present worth revenue requirements tests that's applied to many different facets or analysis that's applied to many different facets of utility regulation. But that particular report or small book that I wrote did not address or relate directly to electric utility cost and service and rate design issues.

Q Mr. Wright, have you ever worked for a utility as a system planner or a cost of service analyst or a rate design expert or technician?

I'm talking as an employee of one.

A No, sir.

Q Have you ever worked for a customer, a

corporation customer, that buys electricity in dealing with these issues?

A As a direct, regular-line employee of the corporation?

Q Yes, sir.

A No, sir.

Q All right, sir. Now, I would perceive that the great bulk of your knowledge with respect to cost of service principles and rate design came after 1984 when you were an employee of the Bureau of Electric Rates of this Commission, is that correct?

A The bulk, but not the entirety.

Q All right. Outside of that period, what other areas did you get educational experience or on-job training that helped you with these areas?

A In my early time at the Commission, in the Research Department, I was part of the team that was essentially the contracting arm of the Commission in buying some cost of service software from a contractor. I believe the contractor's name was Economic Engineering Services, Incorporated, out of, I think it was Seattle, maybe it was Tacoma or something like -- maybe it was even Bellevue, but it was someplace up by Seattle.

They prepared, I believe the Commission had

received a grant authorized by the Public Utility Regulatory Policies Act to have some cost of service software prepared. Mr. Henneberger was the chief contracting officer and the head of our team. My role as a fairly new employee in the Research Division was to work on it and familiarize myself with it and do some practice runs of the cost of service methodology -- methodologies, I should say. Because they included both an embedded cost of service package and a marginal cost of service package.

Q So, obviously, you had to learn what the difference was, at that point in time, between embedded and --

A Right, and I had to learn what the steps of functionalization and classification and allocation were and, in general, what we were talking about, and additionally, in that context, I picked up some information about generation system planning.

Q You dealt with salesmen that were promoting the software project?

A No, sir. I don't think characterizing the individuals with whom I dealt as salesmen is accurate. The folks I dealt with were like senior consultants with the firm who had experience in the area. In fact, one of the chief employees of the contractor was a man

named Alan Matthews, whom I believe was the principal author of the American Public Power Association's Cost of Service Allocation Manual.

Q When you recommended a software package to the Commission, did the package -- was it able to do it both ways or was it limited in the cost of service methodologies that could be chosen?

A You asked the question, "Was it able to do it both ways? " I did not understand that part.

Q Well, many ways.

A Yes, it was. You could choose all different kinds of allocation methodologies, and you could choose from an embedded cost method package and a marginal cost method package. And within the embedded cost method package, at any rate, you could choose to classify and allocate in several different ways.

Q The software package that you recommended to the Commission, could it do a broad periphery of studies?

A I'm not the sure what you mean by "broad periphery," but I think it could do any of the studies that are on the table in this case.

Q All right. You participated, you said your main assignments were in the Commission's generic cost of service docket and the generic nonfirm rates docket.

I presume you picked up some pretty good experience there. Were you an expert Staff witness testifying in those cases or were you a Staff person learning about what was going on from the testimony that was presented?

A In the generic cost of service docket, I think we held a workshop. There was never a hearing held in that docket. The full title of the docket was "Generic Investigation into Cost of Service Methods in Relation to Time-of-Use Rates." I was the principal Staff member assigned to it. I wound up writing a short report to fulfill the charge of the docket that the Commission, I believe, accepted it internally -- no, I believe since it was a docket, I think it would have been accepted at the Agenda Conference.

Q Essentially, report to the Commission on this issue and --

A Yes. Exactly. Now, in the generic investigation of nonfirm rates, the judgment was made after one or more workshops to make that docket into a rulemaking proceeding in which I was, indeed, the Staff's expert witness. In fact, I recall you and I had an excellent discussion on cross examination in that docket.

Q And, as always, you enlightened me greatly.

A It was mutual, to be sure.

Q You participated in the self-service wheeling petition of W. R. Grace and Company. As I recall, that was a case in which Grace had a cogeneration plant and a mine, and they wanted to send Grace's electricity over Tampa Electric Company's wires down to its mines. And the Commission determined that it could not do that. Is that correct in that case?

A That's pretty close. I believe that the Commission determined that it would not order Tampa Electric to provide the self-service wheeling service petitioned for by Grace.

I don't think they said they couldn't do it. I think they said, "We would not order the Utility to provide the requested service."

Q And Grace went ahead and built the line themselves because Tampa Electric wouldn't permit them to wheel?

A It's my understanding that three or four years subsequent to that docket they finally completed construction of the line.

Q And you participated in the Commission's generic docket on appropriate rates for standby service. And then you became the Chief of the Bureau of Electric Rates and you supervised, recruited and

trained five persons on the professional Staff. Are those persons still with the Commission?

A Three of them are.

Q Are they participating in this case?

A Yes, sir.

Q Are you advising with them in this case?

A No, sir.

Q Have they adopted your philosophy in this case?

A I don't believe so, according to the prehearing statement, the prehearing order. They have taken the position, so far, in favor of the refined equivalent feature method.

Q Since you have become a consultant, it appears you've done a good bit of work on behalf of cogenerators?

A I think that's a fair statement, yes, sir.

Q Essentially what does that work revolve around?

COMMISSIONER GUNTER: This sounds like a job interview.

MR. McWHIRTER: That's kind of. We're trying to figure out what his experience is.

COMMISSIONER GUNTER: That's what I mean. It sounds like a job interview.

MR. McWHIRTER: It really is.

COMMISSIONER GUNTER: Got any openings over there? Scheff, is he paying you enough?

WITNESS WRIGHT: Excuse me, sir?

COMMISSIONER GUNTER: Nothing.

Q (By Mr. McWhirter) What do you do for cogenerators, Mr. Wright?

A I'm just going to make a list of my clients and then I'm going to identify what it is I do for them.

Q Okay. (Pause)

COMMISSIONER GUNTER: 30-minute job interview.

A My testimony indicates that I'm employed in two capacities at the present time. I'm employed with the law firm of Wiggins and Villacorta in the capacity of resident economist and special consultant on regulatory matters. I'm also employed by a separate Florida corporation, West Park Group, Incorporated, which is a consulting firm, As the Vice President and principal consultant. I do work and have done work for cogenerators through both of these entities; that is, through both the law firm and through the consulting firm.

I participated extensively in our law firm's

work representing Empire Energy Management Systems, which is a cogeneration developer that is now in the process of constructing a qualifying facility cogeneration project on McDill Air Force Base. I have done some work for one particular cogenerator, a sugar refinery operation, as it relates to their standby rates status, vis-a-vis their host utility.

I've done some work with another cogenerator as relates to their status under the host utilities standby rates, specifically whether certain power they take is supplemental or whether it's backup and maintenance power. And I've also consulted with them on issues pertaining to gas costs in relation to a natural gas utility rate case that will almost surely have an effect on them. And preliminarily, at least, in relation to the possibility of their selling power to their host utility.

I did some work for a developer, or a hopeful developer, of large cogeneration projects in Florida in conjunction with the Commission's cogeneration rulemaking docket. I was not a witness for them. I did research and helped them draft commentary on the proposed rule, things like that. That specifically was through the consulting firm.

I do some work for another developer of what

are commonly called "Packaged Cogeneration Systems," fairly small, real small, when you get right down to it, under 50 kilowatt packages, that produce hot water, chilled water, chilled refrigerant and are capable of producing electricity. In that context, I do a variety of things for them, ranging from legal research to reviewing their business plans to trying to help them line up some financing.

Q You appeared on behalf of the Michigan Attorney General in the Consumer Power Company case, the power supply case?

A That's correct.

Q Did you offer expert testimony in that case?

A Yes, sir, I did.

Q Were you accepted as an expert witness in that?

A Yes, sir, I was.

Q In what field of endeavor, sir?

A Cost of service and rate design and over Motions to Strike.

Q Has that case been concluded?

A Yes, sir.

Q The state of Michigan adopted your philosophy?

A No, sir. They went with the Company's

position, which I also testified was reasonable under the circumstances.

Q To your knowledge, has any other state or regulatory agency adopted your equivalent peaker methodology?

A I'm not sure that I can say it's been adopted in identically the form in which it was adopted by this Commission in Tampa Electric's '85 rate case. Minnesota has adopted a cost of service methodology that is at least very, very similar, and possibly identical.

In reviewing -- I'll tell you, in the course of the Michigan case, my colleague, Dr. Daryl Nall, telephoned a variety of state utility commissions and asked them how they did it. The information she gleaned from her conversation with folks from the Minnesota PC indicated what they did was virtually identical to the methodology that I advocate. They sent us a copy of an order; reviewing the order, I can't conclude that it was exactly identical to what we did here, but I think it's safe to say it was fairly similar.

Nevada uses as marginal cost basis that incorporates some peaker methodology characteristics. The New Jersey Board of Public Utilities had placed

before it something very, very similar to a peaker method by the utility there, PS E&G. My understanding is the Utility submitted that study in an effort to have a moderate amount of reduction plant cost classified by demand-related BPU; rejected that approach and allocated even the percent classified as demand-related, based on an equivalent peaker approach, as energy related and allocated that on a basis as excess energy consumption, which was defined analytically as the difference between energy consumption in the peak hours and some base amount.

So my perception and understanding from my conversation with the fellow on the New Jersey BPU Staff was that the methodology they adopted was even more heavily oriented towards energy than my equivalent peaker methodology.

Q This is in New Jersey or Nevada?

A New Jersey.

Q New Jersey. And you say Nevada has adopted it?

A Nevada does something that is like what you might call a marginal peaker study. They set the demand charge for on-peak use equal to the cost of a new peaker, and then they spread the other costs on energy.

Q That's just kind of an element of it. Michigan rejected it, and what approach did it take?

A The specific issue in the case in which I testified in Michigan, Case No. U-8866R, was the proper allocation of power supply costs or specifically of capacity charges paid to QS under power purchase agreements.

The Commission's practice had theretofore been to allocate and recover those costs on a cents-per-kilowatt-hour basis; and, in that, it exactly reflected their practice of setting the contractual payments for QF power to QS and IPPs on a cents-per-kWh basis.

My testimony in that case was that it was reasonable to do it in that case under its particular circumstances; but that were I left to my own devices and if they were asking my expert opinion -- but, of course, since I drafted the prefiled testimony, I did -- I told them I thought that the issue should be considered in a general case with the costs, the capacity costs, allocated according to an equivalent peaker methodology.

The Company proposed to continue doing it on and an all-energy basis. I testified that it was reasonable to do so, and the -- actually, I misspoke a

while ago; it doesn't change anything substantively. I said the proceeding had been concluded; it hasn't been concluded. The administrative law judge has issued a Proposal For Decision, or PFD, recommending that the Commission continue its previous practice of allocating the capacity charges on an all-energy basis. And it's that Proposal For Decision that has gone to the Commission.

COMMISSIONER GUNTER: Are we getting close?

MR. McWHIRTER: I'm about done, yes, sir, with respect to his qualifications.

COMMISSIONER GUNTER: Okay. Well, 20 minutes ago you were real close.

Q (By Mr. McWhirter) I noticed that you -- well, as I understand it, we're dealing here with your expert opinion on cost of service then and on rate design; and you're not holding yourself out as an expert in any other field, such as system planning or things of that nature?

A That's correct.

Q All right. You want to set the general service rates the same as the residential service rates.

I remember when I worked for the Commission years ago, I asked some wizened oldtimer in the Rate

Department why it was that they charged a business a higher charge for telephone than they did for a residence when they both just had one telephone at one number. He said, "We use what we call 'value of service concept.'" And I perceive that the same thing is happening in the electric industry where you have businesses and residential, there's some value of service concept on the business charge and that's how the charges got separated early on?

A That's not my understanding of how that came to pass. As briefly as I can, my understanding of how that came to pass was that the GS number and demand allocation coming out of the load research study was the plug number. All the others had reasonably well-defined estimates. And then they had a system number, and the GS number was the difference. And when it came out, it came out indicating that they ought to get a whole bunch of costs assigned to them. And so they did, and the rates got up there.

Subsequent to that, I think in the next Gulf case, I think Gulf proposed to set them equal and for some reason the Commission decided not to do that. Whether that was the last case that was completed before this one, I don't know.

I think there was another one in '84, in

which it was an issue; but I don't think it had to do with value service pricing, Mr. McWhirter, I think it had to do with flat-out a defect in load research.

Q Isn't it true that in every utility in Florida that the general service rate is higher than the residential service?

A Not to my knowledge. I think that it's true -- I can back up. I can tell you that I know that it's true for some municipal electric utilities. I think that Florida Power Corp. and Tampa Electric the rates are exactly equal. And I believe that for Florida Power and Light they are essentially equal. I say, "essentially," because Florida Power and Light still has in place an inverted rate structure for its residential consumers. I believe the GS rate is set to be equal to the RS rate at some break-even point of maybe 1500 or 2000 kilowatt hours a month, something like that.

But, no, I don't think it's true at all that the business rate general service rate is higher than the residential rate for the other substantial IOUs in the state.

Q That's must be a misperception on my part.

The Statute, 366.06, states that the Commission should take value of service into

consideration in setting rates. Do you believe that it should or should not? And have you done it in your analyses?

A You said something as a premise that I don't recall whether it's true exactly or not. You said, "It should consider value of service pricing." I'm not sure whether it's -- the statutory charge is mandatory or permissive. If it says "should," it says "should." I just don't recall. But I'll answer your question.

Q The statute says, "In fixing fair and just and reasonable rates for each customer class, the Commission, to the extent practicable, should consider the cost of providing service to the class..."

A Okay.

Q "...as well as the rate history, the value of service and the experience of the public utility, the consumption and load characteristics of the various classes of customers and public acceptance of the rate structure."

Now, does your EPC method take value of service into consideration?

A No, sir. And to answer your previous question, I do not advocate value-of-service pricing.

Q And as I understand it, your study is a departure from the history of this Utility, which has

always had cost-of-service methodologies based on a peak responsibility system?

A I think your characterization goes a little too far, Mr. McWhirter. When you say "always add cost of service methodologies based on," I don't think it's quite true that they've always had cost of service methodologies based on peak responsibility. I think earlier, in the '70s, that they had -- that the cost-of-service methodologies that were employed for Gulf Power were based on an older peaking average demand method that allocated cost based on contributions to a peak demand, and on contributions to an average demand in proportion to the relative magnitudes of the peak demands and the average demand versus each other.

Subsequently, we went to a 12 CP and one-thirteenth. My belief is that originally Gulf just added in the average demand as a thirteenth number, which resulted in some 4% or so of production plant cost being classified as energy-related and allocated on that basis. And the Commission corrected that and said, "No, we want you to at least use one-thirteenth or 7.69% as energy-related and allocated, classified and allocated accordingly."

Q Your cost of service study is essentially

energy-dominated, isn't it?

A It's moderately energy-dominated, depending on the analysis that you do for the production plant, and to what component thereof is classified as demand-related and energy-related. It's either 55 or 60% energy-related, and correspondingly 35 or 40% demand-related. So it's energy-dominated, but it's not a whole lot more than 50/50.

Q And in TECO cost of service case, as I recall it, energy, under the equivalent peaker method, accounted for about 72% of the allocation of production plant, is that not correct?

A It's close. Actually, I believe it was a little over 74%.

Q But the study that you recommend today is not nearly that intense?

A That's correct. It has to do with the unique characteristics of the Gulf system, as compared to the Tampa Electric system.

Q Have you followed what's happened as a result of the implementation of that peak responsibility study, or the equivalent peaker methodology adoption in the Tampa Electric case?

A I'm not sure of all of the possible ramifications of your question, but I'm familiar with

some of the things that have happened subsequent to -- (Simultaneous conversation) -- subsequent to the implementation of rates based on the peaker study.

Q Have you noted that in the TECO system industrial growth has tapered off, whereas in the neighboring utility, Florida Power Corporation, industrial load has grown substantially?

A I noted that from 1985 to 1986 industrial energy use on Tampa Electric's system declined substantially. During the same time period, Power Corp's also declined slightly. Since that time I think Power Corp's has grown moderately and that Tampa Electric's has been fairly close to what it was in '86. I don't believe that the conclusion that this is attributable directly to the option of the equivalent peaker method is warranted by all the circumstances surrounding this, however.

Q Have you noted the number of industrial consumers that have gone to cogeneration in the Tampa Electric service area as opposed to the other?

A I haven't kept an exact count or record of the number that have gone to cogeneration. I know that some have. I know that substantial amounts of load were already planning to go to cogeneration and were,

in fact, in the process of installing their cogeneration during the pendency of Tampa Electric's rate case and the related docket, 850246, Tampa Electric's petition for emergency closure of its interruptible service rate class -- rate -- yeah, rate class, that's it.

Q When you were back in Economics 101 teaching, and when you were learning your economics, did you ever hear of the phrase "cheaper by the dozen"?

A I've heard the phrase. I don't recall whether I heard it in my economics courses.

Q What is the significance of that "cheaper by the dozen"? What is the rationale for that comment?

A To the ordinary lay person, the rationale for that comment is that if one can sell a substantial volume to a particular customer, the merchant will give a discount.

Q Would it be fair --

A At least as a marketing ploy.

Q Is it not normally, based on cost, cheaper to supply a dozen of something rather than one because you have -- you spread your overhead and things like that?

A Probably.

Q Would it be fair to say that the EPC method could be characterized as more expensive by the dozen,

since if you have more energy consumption you're apt to receive a greater allocation of the production plant?

A Only relative to an all-peak demand, or heavily peaked demand weighted cost of service allocation method.

Q I don't quite understand that response.

A I think if you look at the results of an equivalent peaker study, you will still see that consumers who use large volumes of electricity will pay a lower overall rate per kilowatt hour. It just won't be as low as the overall rate per kilowatt that they may have become used to paying coming out of 12 CP and one-thirteenth cost studies.

Q If the rate history and their acceeptance -- say somebody
builds a $100 million plant in the Gulf service area in anticipation of rates being as they were established when he started construction of the plant, that customer would see a fairly dramatic increase in his rates, would he not? (Pause) If you adopt the EPC study?

A He'd see an increase. It may or may not be fairly dramatic, depending on the overall level of revenue requirements approved for the Company. It could be dramatic, I'll certainly grant you that.

Q In your analysis for prospective cogenerators, I presume that you have analyzed the cost of -- say you have a customer that is paying the Electric Company $10 million a year. Would you go to that customer and give him an analysis on what cogeneration would do for him, and could he normally make the electricity that he uses for himself at a price lower than the $10 million a year? Don't know?

A Mr. McWhirter, I'm sorry, I lost track of your question.

Q That probably was an ineptly-phrased question.

Say you have a customer that has a substantial use for steam and an electric bill of $10 million. Would you say that that customer is a prime candidate for a cogeneration project?

A Exactly as you asked the question, yes. A customer with a substantial thermal load and a substantial electric requirement is certainly a live candidate for cogeneration.

Q And if you increased his rates even more, he would be a "liver," candidate for it, I would presume?

A Sure, it would -- obviously higher electric rates would improve the cost effectiveness of any potential cogeneration.

MR. McWHIRTER: Tender the witness.

MAJOR ENDERS: No questions.

COMMISSIONER EASLEY: Mr. McWhirter, you're the first attorney that asked every one of my questions.

MR. McWHIRTER: I'm sorry --

COMMISSIONER EASLEY: Me, too.

MR. McWHIRTER: -- that I took you away from that opportunity.

CHAIRMAN WILSON: Who wants to go next?

MR. PALECKI: Staff will go last.

CHAIRMAN WILSON: Mr. Stone?

CROSS EXAMINATION

BY MR. STONE.

Q Mr. Wright, I believe you answered this question but I'm not sure I heard your response. You do not hold yourself out as an expert on system planning from the perspective of an electric utility, do you?

A No, sir.

Q Have you conferred with any system planners at Gulf Power Company or within the Southern Electric System on the criteria used in planning their generation systems? (Pause)

A I was expecting you to ask me the question have I ever had such conferences during the pendency of

this rate case, to which the answer is specifically no.

Have I ever had conferences or conversations with Gulf Power's planning personnel as to planning practices?

Q Specifically, my question was have you conferred with any system planners at Gulf Power Company or within any of the operating companies of the Southern Electric System on the criteria they use in planning their generation systems?

A I don't think so. I don't think so. I think I have had conversations with planning personnel in Southern and probably in Gulf, but whether they addressed specifically the criteria they use, I don't recall. I have had conversations with a former member of the Southern Planning Staff as to certain aspects of the planning criteria, particularly the four-hour rolling average peak as it rolls into generation planning.

Q Mr. Wright, under the equivalent peaker concept, is there a presumption that a combustion turbine would operate and theoretically replace the load requirements currently provided by coal units?

(Pause)

A Would you please just simply restate the question?

Q Under the equivalent peaker concept, is there a presumption that a combustion turbine would operate and theoretically replace the load requirements currently provided by coal units?

A No. The equivalent peaker concept is that if the Utility has to build capacity to satisfy reliability considerations and requirements, that absent a large energy load that the additional capacity would also serve, it would build a peaker. It's not the premise of the peaker method that a combustion turbine would replace a coal unit if a coal unit were the indicated economic choice coming out of the planning analyses, then that's the unit that would be built.

Q I believe you've misunderstood my question once again.

Specifically, we're asking whether your concept of the equivalent peaker carries with it a presumption that a combustion turbine would operate today and theoretically replace the load requirements currently being provided today out of existing coal units? (Pause)

A Are you asking me if you built a peaker today, would it replace all the power that's presently served by a coal unit?

Q Let me ask the question from a different perspective, Mr. Wright.

Gulf Power Company has adequate generation resources at this time.

A Yes.

Q Do you agree with that statement?

A I've also heard the word "ample" used, but yeah, I'll agree with adequate.

Q And for the most part, those are coal units.

A I believe your information indicates that about 92% of Gulf's capacity is coal fired. That sounds right to me.

Q Under vour concept of the equivalent peaker, would that existing capacity that is currently operating to serve the load requirements of the Company and its customers, would a combustion turbine, if it were immediately available today, would it replace and idle that existing embedded capacity?

A Is your question if a combustion turbine were immediately available today, would the Utility run it, thereby displacing power that it could otherwise generate from coal-fired capacity? That's what I understood your question to be and if that's your question the answer is no.

Well, with the exception that if you're

running coal-fired units in a small number of peak hours on cycling duty, you might actually find that it's more economical to run a peaker, but that would fall out of your production cost run.

CHAIRMAN WILSON: I'm not sure I understand what the thrust of your question is. Is it that the equivalent peaker methodology ignores embedded plant, embedded costs and embedded decisions?

Q Perhaps I can rephrase the question.

Under the equivalent peaker concept you only consider the peak hours, is that correct? In determining whether you build a combustion turbine or some other form of capacity?

A Under the equivalent peaker concept the methodology recognizes that the utility's reliability considerations, which are generally driven by reliability index values, and some critical number of peak hours drives and determines the utility's need for additional capacity and the timing of the need for that additional capacity.

COMMISSIONER EASLEY: Was that a yes?

WITNESS WRIGHT: Commissioner Easley, I'm sorry. I don't think -- I'm really not sure the question was straightforward enough to give a "yes" or "no" answer to. I'm trying to explain what the concept

of the peaker is.

The concept of the peaker is if you've got a short duration peak demand, it will most economically be served by a peaker.

COMMISSIONER EASLEY: Well, I heard --

WITNESS WRIGHT: And generation expansion planning includes an economic analysis from which the result follows that if there is a lot of load to be served, the Utility will not build a peaker but because of the energy loads to be served, will build a baseload unit instead.

COMMISSIONER EASLEY: Do I misunderstand that -- I thought the question was you only consider peak load.

WITNESS WRIGHT: For the purpose -- peak load will cause the utility to build a peaker. Therefore, I hold that it's appropriate to allocate the cost of peaking capacity on the basis of peak hours.

COMMISSIONER EASLEY: And no other consideration?

CHAIRMAN WILSON: All the generation that's generated on peak would be provided by peakers.

WITNESS WRIGHT: No. The capital expenditure decision to build a peaking plant would be driven by contributions to peak hours.

If the energy load associated with an increase in peak demand were of sufficiently short duration, then it would be served by the peaker. The utility would build a peaker and serve it with a peaker.

MR. STONE: Commissioner, I'm ready to proceed on to another.

CHAIRMAN WILSON: Go ahead. I'm trying to find what I read here.

Q (By Mr. Stone) Mr. Wright, are you familiar with the amount of metered customer generation data that Gulf Power Company has available for its SS customers?

A No, sir.

Q You have heard in earlier testimony that there are only four SS customers, have you not?

A Yes, sir.

Q Do you have any reason to dispute that?

A No, I don't have any reason to dispute that there are only four SS customers on Gulf's system.

Q But you're not aware of when the generation meters were installed?

A Your question is am I aware of when the generation meters were installed?

Q That is correct.

A No, I'm not aware of when the generation meters were installed.

Q Assume with me for a moment that on this four customers, you have generation meters. On one of those four customers installed as recently as February 1990. And the next most recent had a generation meter installed in June of 1989. And that there is no generation meter on a third customer of the four. And that the fourth had a generation meter installed from the beginning of its SS service.

A Would that be April '88

Q Yes. Do you believe that the data that the Company would have available from those generation meters would absolutely be representative of future load characteristics of the Company's SS customers?

A As you phrased the question, no, I don't believe it would be absolutely representative of the future standby loads that those customers would be expected to impose.

Q Would you also then believe that it would be appropriate to collect more data in order to determine what would be more representative of the future loads of these SS customers?

A Certainly. As required by Order 17159.

MR. STONE: Commissioner, that's all I'm

prepared to do at this time with Mr. Wright.

MR. PALECKI: Commissioner, Staff has approximately one hour of cross examination. If we were to start now we would complete our cross at approximately 7:30. Should we proceed?

CHAIRMAN WILSON: The sooner you proceed, the sooner we'll be through.

CROSS EXAMINATION

BY MR. PALECKI:

Q Mr. Wright, do the large customers with dedicated substations have a much larger impact on the Company's investment in local facilities than GSD customers

A I'm sorry. I maybe misunderstood. Did you say, "Do customers that have dedicated substations?"

Q Yes, large customers with dedicated substations.

A I'm sure that they cause the Company to spend more in dollars for distribution plant.

Q Isn't it true that the local facilities' charges on the standby service rate schedule are much larger for GSD than for PXT customers?

Referring to --

A Yes, that's true.

Q Do all of the PXT customers have dedicated substations?

A I believe so.

Q The Company has classified uncollectible accounts expense as customer-related and allocated it to the RS, GS and GSD classes on average number of customers. Doesn't classifying these costs as customer-related mean that for a particular rate class a customer with a small bill will pay just as much uncollectible expense as a customer with a large bill?

A Yes, It does. Well, to be perfectly clear, it means that the customer will be allocated as much uncollectible expense as the customer with the large bill. If those costs are tracked through into rate design, then your statement is true. If rates are set at unit costs and the unit costs include the cost per customer for uncollectible expense on a one-for-one basis, then the answer to your question is "Exactly, yes."

Q If the account of a customer becomes uncollectible. wouldn't a customer with a large bill cause the Company to incur more uncollectible expense than a customer with a small bill?

A Yes.

Q And because the expense was classified as customer-related and allocated on average number of customers, would not an RS customer with a small bill

pay just as much uncollectible expense as an RS or GSD customer with a large bill?

A I missed a few words in the first clause of your question. I think the answer is yes, but if you wouldn't mind repeating it, I would appreciate it.

Q And because the expense was classified as customer-related and allocated on average number of customers, would not an RS customer with a small bill pay just as much uncollectible expense as an RS or GSD customer with a large bill?

A Yes.

Q Would it be more equitable to allocate the uncollectibles between and within classes on revenues and classify it as revenue-related?

A That's my opinion, yes, sir.

To give a little antecdote on that, we saw that was appropriate in Tampa Electric's case in 1985 where in the test year they had had a very large customer enter bankruptcy, leaving Tampa Electric with an uncollectible expense for a large industrial class interruptible, I think, of between 1 and $2 million.

Q In the Company's last rate case, fuel stock of an average daily burn for 107.5 days of 933.9 tons, based on the annual kWh to be generated, was approved. Since the level of fuel stock is a function of kWh to

be burned in the test year, should fuel stock be classified as energy-related?

A I believe so.

Q The Company has removed the kWh used by SE customers during SE periods which results in a higher unbalanced 12-CP load factor of 107% than the 101% unbalanced 1987 load factor if the kWh had not been included.

If the Company has forecast the same, or smaller, percentage of kWh to be used during SE periods in 1990 compared to 1989, and a much larger percentage in both 1989 and 1990 than in 1987, shouldn't there be an improvement in the SE/PXT customers' actual 1989 12-CP load factor compared to the 1987 load factor if the Company's assumption of a changed load pattern and higher 12-CP load factor to the exclusion of the SE kWh in the demand calculation is appropriate and justified?

COMMISSIONER EASLEY: You're kidding. (Laughter) Just say yes or no, it wouldn't make any difference. (Laughter)

WITNESS WRIGHT: Mr. Chairman, I'm sorry, that was really too long for me to follow. I was going to ask my attorney if it might be appropriate and fair to ask Staff to submit that question, and those like it, in writing so I could look at it and reflect on it

to give an answer. It's just too much to follow, I'm sorry.

MR. PALECKI: We'll omit that.

CHAIRMAN WILSON: His problem is we all followed it. He's the only one in the room that didn't know what he was talking about. (Laughter)

COMMISSIONER EASLEY: That's why I was so surprised. (Laughter)

Q (By Mr. Palecki) On Gulf's current standby service tariff, daily standby service kW is the maximum totalized customer generation output occurring in any interval between the end of the prior outage and the beginning of the current outage, minus the customer's daily generation output. And we'll refer you to the page of the MFR so we can all look at it. (Pause)

My question is would it be more appropriate to have standby power equal to the amount of load in kW ordinarily supplied by the customer's generation, minus the customer's generation output in kW, minus the amount of load in kW, as direct result of customer's generation outage?

A I think you left out a word. I think you meant to ask me wouldn't it be better to define standby power as the load ordinarily served by customer generation, minus the amount of customer generation

during an outage, minus the amount of load that the Utility does not have to serve as a direct result of the customer's generation outage?

Q Yes, that's the question we would have liked to have asked you.

A The answer is yes, and that's exactly what's prescribed -- well, at least conceptually, and I think specifically what's prescribed by Order 17159.

Q Thank you. How would you resolve the problem that the compliance cost of service study won't be completed before the final agenda conference and we will not be able to use system unit costs at the approved system rate of return to determine the actual increase to standby service and the standby service rates in accordance with Order 17159? (Pause)

A The best answer I've got is that, if it were at all possible, I would reschedule the rate design agenda to accommodate the compliance studies schedule. Failing that, my recollection from when I worked in rates, and I didn't work specifically on this matter, but my recollection from when I worked in rates is that there has been developed a methodology that has been supported by Company witnesses, including those for Tampa Electric and Florida Power Corporation, for going from unit costs indicated by the existing cost studies

to those in the compliance study based on the overall revenue requirement level. My recollection is that that methodology will get you about as close as you can get, and that's what has been done in the past.

Q Did you write the April 23, 1987, recommendation in Docket 850102-EI that's been stipulated into evidence as Exhibit 519?

A Yes, sir, I did.

Q In the recommendation, one of the conditions for permanent approval of the SE rider was that the SE rate should be a separate rate class effective with the Company's next rate. Did you recommend that condition for approval to assure proper allocation and recovery of demand-related production and transmission costs and of local transmission and distribution costs for SE customers?

A Yes. I did. We did.

Q Has your position in this condition for permanent approval of the SE rider changed?

A No, sir.

Q The last sentence on Page 8 of the recommendation states that, "Staff has discussed this concern with Gulf personnel and they agree that they will treat the SE customers as a separate rate class in the Company's next rate case."

What was the basis for this statement?

A Conversations that we had with Gulf's rate personnel. We had expressed concerns specifically that there could be an underrecovery of distribution costs and potentially also an underrecovery of production and transmission costs that would, by a cost analysis, properly be attributed to the supplemental energy customers. And, basically, the Company didn't want to address that issue at that time. They said, "That's an issue that's appropriate for a rate case."

We said, "Well, it doesn't look like there's going to be any harm done. You guys are giving up some money in the meantime to the degree that there is an underrecovery. And if you don't want to ask for the money, I guess we're not going to make you take it."

We did make clear, I believe, our position that the rate should be redesigned based on considerations of local facilities costs, and also based on considerations of potential differences between the peak demand kW characteristics and the billing demand kW characteristics of SE customers, as opposed to those in the general LP and PX rate classes.

So we expressed that. My recollection is that the Company said they didn't want to do it then.

They agreed that if we were going to do it, we'd do it in a rate case, and we all agreed to address it then.

Q Does Order No. 17568 in that docket require that SEs shall become a separate rate class in the Company's next rate case?

A Yes, sir, at Page 2, third paragraph.

MR. PALECKI: We would ask that the Commission take notice of its Order No. 17568 in Docket No. 850102-EI.

CHAIRMAN WILSON: We will take notice.

Q (By Mr. Palecki) Do you remember making a verbal agreement with the Company not to make the SE a separate rate class for either cost of service or rate schedule purposes in any preliminary conference regarding the MFRs in that docket or in docket 881167-EI?

A No, sir, I don't recall making any such statement, and, furthermore, I note that I was aware that I would not have had the authority to make such statement. That would have involved my personally overriding a Commission's order, and I knew well from a previous matter relating to Gulf and its administration of its supplemental energy rate that that was not within my province to do. So I'll spare you the anecdote in the interest of time.

Q Thank you. We'd like to refer you to Exhibit 517, Gulf's response or revised response to this interrogatory shows that five of Gulf's six SE customers have dedicated substations, three of them built in 1989. And Gulf's response to Interrogatory No. 139 of Staff's Eighth Set shows PXT customers taking service on the SE rider were billed only 59% of their maximum metered kW.

MR. BURGESS: Excuse me, Mr. Palecki.

Mr. Wright do you have a copy of that exhibit? I was going to try to get ours and bring it over if you don't have it.

WITNESS WRIGHT: I am not sure whether I have Exhibit 517. I have a revised Item No. 139, Staff's Eighth Set dated June 11th, 1990. But, I don't know whether that has been specifically identified as Exhibit 517.

MR. PALECKI: We have copies of that exhibit we will provide to the witness.

WITNESS WRIGHT: Thanks. (Pause)

Q (By Mr. Palecki) We'd refer you specifically to Line 4-A under PXT customers on the SE rider.

A Okay. On Page 2 of 4?

Q On Page of 2 of 4.

A Okay.

Q Do these stacks indicate that there is an underrecovery of substation costs from customers taking service on the SE rider, particularly PXT customers taking service on the SE rider? (Pause) Referring to Page 3 of 4 of that exhibit, specifically Line C-4a, Ratio of Billed Maximum kW to Actual Maximum kW.

A Uh-huh.

Q We would point out that PXT customers not on the SE rider were billed 100% of their maximum metered kW. And you're question is whether these facts indicate whether there is an underrecovery of substation costs from customers taking service on the SE rider, particularly PXT customers taking service on the SE rider. (Pause)

A It depends a little bit on the -- on the steps in the cost study, but I believe that this information indicates that, assuming direct assignment of the substation cost to the classes, it shows that the customers not on the SE rider are paying on a 1-for-1 -- 1-to-1 basis, billed kW to maximum, that customers on the SE rider are only paying .59 of a kW, billing kW, for each kW of maximum demand they actually incur. Assuming, as I think it would be reasonable to do, that there's a relationship between actual maximum kW and cost to serve on a per kW basis, or to the costs

allocated to the class on a per kW basis, then I think the conclusion that you suggest is correct.

Q I'd like to refer you to exhibit -- I'd like to refer you to Exhibit 480, which is MFR Schedule E-8a, and Industrial Intervenor's Second Set for Production of Documents. Is that one of the exhibits that you have?

MR. BURGESS: Which one?

MR. PALECKI: 480. We'll provide the witness with that exhibit.

Q (By Mr. Palecki) We'd refer you to Line 20, which shows that the unit of cost for distribution demand-related costs for the PXT class at present rates is 70 cents. The present PXT maximum demand charge is $3.56. When a maximum demand charge for a class is higher than the distribution unit costs or costs other than distribution system are local facility costs being recovered through the maximum demand charge?

A Yes.

Q Because costs other than distribution or local facility costs are being recovered through the maximum demand charge, does the fact that on average SE PXT customers are billed only -- on only 59% of their maximum meter kW mean that there is currently underrecovery of other types of costs from SE PXT

customers?

A When you say "other types of costs," do you mean costs other than local facilities or distribution costs?

Q Correct.

A Again, you have to assume, and I think it's reasonable to do so, that there is some relationship between the costs that are allocated to the class and maximum metered kW. To the degree that that relationship exists, then again, your conclusion or your suggested conclusion is correct. There is an underrecovery problem.

Q Does it depend on the rates of billing kW to 12 CP kW for SE customers versus non-SE customers?

A As relates to production and -- excuse me, as relates to demand-related production and transmission costs, that should be the case.

Q The Company has had four or less customers on PX, PXT for approximately the last ten years. The Company has time recording, load research meters on all the PX/PXT customers. Should there be any problem with the meaningfulness of the cost of services analysis for the PX/PXT class?

A No. Specifically, no, in that you've got population data, not sample data.

Q Would that also be true with a breakout of SE customers, that is if they all have time recording meters?

A That should be true. I'm not sure -- my understanding is that Gulf now has six customers on the SE rider as it presently stands. There might be some discrepancy in the representativeness of data, if there's some anomaly in the newest customer or customers' consumptions since they came on the rate. But overall, again, you've got population data and it should be meaningful.

Q Are the kWh and capacity used by SE customers interruptible?

A No, not in any sense in which the term "interruptible" is used as a rate design term of art by this Commission or anywhere else that I am aware of. Interruptible means and was explicitly defined to mean by this Commission in its nonfirm service terms and conditions rule, service that is interruptible, subject to being turned off by the electric utility at its discretion.

In other places interruptible does mean what we in Florida call curtailable, that is it's subject to a demand for curtailment by the utility, but neither of those cases applies to SE. If the customer wants to

continue to use his load during a non-SE period, he's free to do it. He just pays the rates.

Q If the revenues in the rate case at the present rates are based on the rates of the class in which the customer is currently taking service or migrating from, isn't this an assignment to the migrating customer of the cost of the class in which they're taking service before migration?

A I'm sorry, Mr. Palecki, I missed a few words in the opening section of that question. If you could repeat it, I'd appreciate.

Q If the revenues in the rate case at the present rates are based on the rates of the class in which the customer is currently taking service or migrating from, isn't this an assignment to the migrating customer of the cost of the class in which they are taking service before migration?

A Yes, I believe so.

Q If we know that a given change in the rate structure of two classes -- if we know that given a change in the rate structure of the two classes, it is cost effective for the customer to migrate to another class, do we know that the cost to serve of the migrating group of customers is that of either the rate class from which it is migrating or the class to which

they are migrating?

A No.

COMMISSIONER EASLEY: Then I didn't understand the preceding question. When you said "yes," I thought you were saying that the assignment was to the migrating customer prior to migration.

WITNESS WRIGHT: I believe the preceding question had to do with the revenues of the customer, and the last question had to do with the actual cost to serve the customer.

COMMISSIONER EASLEY: All right. Then you're right, I didn't understand it. Thank you.

Q (By Mr. Palecki) Will the cost of service have been run for the group of migrating customers to determine their actual cost to serve three or four days after the first agenda when the final design of rates must be complete?

A That depends on several things, including what all the cost analyst, Mr. O'Sheasy, has to do. It may have been in response to an unrelated question, but I thought this morning he indicated that it might be possible to get the cost of service study done in a couple of days if there were not extensive revisions required. I believe that I understood Mr. O'Sheasy to say that this morning.

Q Is it quite probable that the cost to serve of a group of migrating customers is somewhere between the cost to serve each of the two involved classes?

A That makes intuitive sense to me. I would think it would be true.

Q Is it fair and reasonable to require either the class to which they are migrating or from which they are migrating to absorb the entire shortfall when we don't know what the actual cost to serve of these customers is?

A Probably not.

Q Is splitting the shortfall due to the migration between the two involved classes on the revenues of the two classes a reasonable and fair method given that we don't know the cost to serve on the migrating customers?

A I would say so, particularly given your assumption that you don't know the cost to serve, which in turn, I believe, assumes that you haven't been able to redo the cost of study with the migrating customers' cost factors incorporated into the class in which they migrate.

Q Are you aware of any more equitable method?

A No.

MR. PALECKI: Commissioners, Staff has omitted

quite a few of its questions and we have no further questions at this time.

CHAIRMAN WILSON: Questions, Commissioners?

MR. BEARD: Just one.

COMMISSIONER EASLEY: I have one.

CHAIRMAN WILSON: Redirect?

REDIRECT EXAMINATION

BY MR. BURGESS:

Q Mr. Wright, you were asked a number of questions, first by Mr. McWhirter and then by Mr. Stone about whether you had performed any system planning analysis for utilities. Do you recall those questions?

A Yes, sir.

Q Do you have any knowledge of the actual system planning mechanisms undertaken by the utilities?

A At least some general and somewhat specific knowledge on how they plan, gleaned from planning documents submitted to this Commission, from conversations with utility personnel, from conversations with system planning staff here at the Commission and so on.

Q Do you have any particular knowledge about the specific system planning criteria used by Gulf Power Company or Southern Company?

A Not so much as to the specific system

planning criteria, but as to their generation expansion planning process and how it incoporates reliability analysis and economic analysis along the lines that I've represented, are fairly standard for utilities.

Q And what knowledge do you have with regard to the generation expansion planning of either Southern Company or Gulf Power Company?

A Well, a review of the Southern Company's Generation Expansion Planning Document submitted to this Commission in the annual planning hearing, 890004, to quote from it, "Generation expansion planning on the Southern Electric System has consistently been characterized by optimized coordinated planning. The Southern coordinated optimized planning process begins with the long-term load forecast to the individual operating companies. In technology screening, the next step in the process, all reasonable technology options for future generation additions are evaluated and screened. Using the select list of generating technologies developed by this screening process --"

COMMISSIONER GUNTER: Shef, you can read faster than the court reporter can possibly keep up with you.

WITNESS WRIGHT: Thank you, Commissioner.

"Using the select list of generating

technologies developed by the screening process the construction costs, operating costs and operating characteristics of the candidate units are then input into the Generation Expansion Optimization Program.

"The program then internally generates a large number of schedules of unit additions which satisfy reliability and load requirements. The revenue requirements associated with these additions, as well as fuel and other operating costs, are then calculated for each year for each of the plants.

"Using present worth of revenue requirements as the economic criterion, the program identifies the optimum expansion plan which minimizes these future costs." This is exactly the economic analysis stage or phase of generation expansion planning to which I have referred throughout my testimony.

The documents goes on: "This present worth of revenue requirements has two components: One is the cost of future capital additions required; the other is the production cost of serving all the load in all the years of the study on a system basis."

I find in this sound support for my proposition and proposal to use system energy at the generation level as the appropriate allocation factor for allocating energy-related production plant costs.

Q You read from a document, as I understand it, that you said was used in Docket No. 890004, is that correct?

A Yes, sir.

Q Would you tell me what document that was?

A The document is entitled "1989 Planning Hearing, Generation Expansion Planning Document, Southern Electric System." Actually when it was filed it was in Docket No. 880004-EU-A, September 1, 1988. I believe by the time it got to the hearing it was 890004-EU-A.

Q And by whom was it filed?

A It says Southern Electric System. It says "This document was prepared by the System Planning Department of Gulf Power Company."

Q You were asked by Mr. McWhirter whether there had been some reduction in industrial usage of electricity in the Tampa Electric Company area, and as I recall you said it was not warranted; the conclusion that this was attributable to the equivalent peaker methodology was not warranted. Could you tell me why?

A Yes. In the first place, a substantial reduction in industrial energy consumption on Tampa Electric's system was not an unusual event. From 1981 to 1982 there was a decline in industrial energy

consumption on TECO's system by some 723,000 megawatt hours. This was about a fourth less than the amount of production observed from 1985 to 1986.

Second, a lot of this load was going off the system anyway. Tampa Electric knew that numerous of their customers with lots of load were already in the process of installing cogeneration or evaluating it or planning to install it during the pendency of the rate case.

Why was the load going off Tampa Electric system anyway? Because Tampa Electric's rates were going up a whole bunch anyway. That rate case was held for the primary purpose of including, or getting into Tampa Electric's rate base, its newest and largest generating unit, Big Bend 4. The addition of Big Bend 4 to Tampa Electric's rate base resulted in the increase in TECO's rate base of more than 55%.

I submit, and I believe that this was testified to by TECO witnesses during the course of the companion docket to 850050, the companion docket being 850246, that a lot of this cogeneration departure of flight was stimulated by the impending addition of Big Bend 4 into TECO's rate base.

TECO's rates are very high anyway. According to the latest published addition of the Florida Public

Service Commission's Report, Statistics of the Florida Electric Utility Industry, in December '88, the most recent data reported in the document, Tampa Electric had the highest rates of all Florida investor-owned utilities for all categories of customers, not just industrial but commercial and industrial as well.

Finally, I think you need to look at what would have happened anyway had the Commission not used the peaker study?

In this context it's appropriate to recognize that the IS-1 and IS-3 rates implemented by the Commission following the Equivalent Peaker Cost Study were significantly and substantially less than the rates proposed by Tampa Electric Company for these classes in the rate case. In the course of looking at this issue I happened to prepare a little table, my attorney has copies to pass out, as to the rates before the case, the rates implemented using the peaker method, and the rates proposed by Tampa Electric.

Do you guys want to pass that out?

MR. BURGESS: We're working on it.

COMMISSIONER GUNTER: Okay. I thought maybe you missed a cue.

MR. BURGESS: No, we just picked up the wrong set of documents.

COMMISSIONER BEARD: Shef, you said that TECO had the highest rates in all rate class?

WITNESS WRIGHT: All rate categories, residential, commercial and industrial categories as distinguished from RS, GS, GSD, GSLD and the IS rate classes.

COMMISSIONER BEARD: And the latest data you have is December of '88.

WITNESS WRIGHT: The Study was published in '89; the data reported in the Study was December of '88.

COMMISSIONER BEARD: We get these things monthly with some published residential rates, at least, on average. And the residential certainly doesn't show TECO to be above.

CHAIRMAN WILSON: That data you have is as of December 1988?

WITNESS WRIGHT: I think it's December 31, '88.

CHAIRMAN WILSON: There have been rate reductions since then.

WITNESS WRIGHT: Yes, sir.

CHAIRMAN WILSON: So that relationship may not, in fact, hold.

WITNESS WRIGHT: It may not.

MR. BURGESS: Commissioner, the question was whether this was likely the variable that drove the industrials into cogeneration.

CHAIRMAN WILSON: I know. He went far beyond answering that to saying something that I don't think is correct anymore. It may have been correct in 1988 but it's not today.

COMMISSIONER BEARD: You might want to even discuss the migration or failure of migration of FPL, that if FPL is now higher, but we didn't go quite that far, did we?

CHAIRMAN WILSON: I have this picture when you talk about migration, of these nomadic hordes driving their sheep or deer across the great Arctic wastelands of north Florida.

MR. BURGESS: You mean that's not what we have been talking about?

COMMISSIONER BEARD: A bunch of little cogens migrating across the county line. (Laughter)

WITNESS WRIGHT: To get right to it, Tampa Electric's Director of Rates, Mr. Campbell, during the case in '85, proposed rates for their Interruptible Service 1 class, the then existing class, that were approximately a third higher in the energy charge than those implemented by the Commission following the

peaker method, and nearly twice as high in the demand charge than those implemented by the Commission following the peaker method.

For the IS-3 class, which is a new class created as a result of that case, the energy charge was slightly higher than that implemented by the Commission following the Peaker Cost Study, and the demand charge was more than three times, in fact, nearly four times as much as that implemented by the Commission.

The numbers are right there on the page and they are from testimony and exhibits of Mr. Campbell in 850246.

MR. BURGESS: Mr. Chairman, could -- excuse me, before we go further, could I get an exhibit number?

CHAIRMAN WILSON: Yes, this would be Exhibit No. 607.

MR. BURGESS: Thank you.

(Exhibit No. 607 marked for identification.)

Q (By Mr. Burgess) Excuse me, I'm sorry, I didn't mean to cut you off, Mr. Wright. Would you please continue your response.

A The point is that the totality of the circumstances I think indicate that there are a whole lot of other things going on to cause the reduction in

Tampa Electric's industrial load. I don't believe that a conclusion that the shift in industrial load or decline in industrial load on TECO's system was attributable to the adoption by this Commission of the equivalent peaker cost method.

Q Let's suppose the full inference of Mr. McWhirter's questions. Let's suppose there is a migration or some movement to cogeneration or some other reduction in usage by the industrials as a result of implementing the particular cost of service study. If the Commission determines that that cost of service study accurately reflects the cost, should they shy away from it because it might reduce industrial usage or some of the other effects Mr. McWhirter questioned you on?

A Not in my opinion. If the Commission is particularly concerned about such effects, I think it already has in place transition rules for smoothing the effect of rate increases, rate decreases, or of shifts in cost allocation methods that are more than adequate to address such concerns.

COMMISSIONER BEARD: Let me ask you a question. As a general policy in ratemaking, if we have the appropriate cost study, we should be migrating towards that plus whatever portion of contribution is

deemed appropriate, as opposed to migrating away from that? In other words, if you have cost is X and you're here, you don't want to be going this way, do you?

WITNESS WRIGHT: That's exactly right.

COMMISSIONER BEARD: You want to go this way.

WITNESS WRIGHT: Yes, sir.

COMMISSIONER BEARD: And that's applicable probably in any industry that is regulated by this Commission?

WITNESS WRIGHT: I believe so, yes, sir. The cost ought to iterate toward cost base rates. In the long run, you ought to be right on it. That's my opinion and my testimony.

Q (By Mr. Burgess) Mr. Wright, you were asked some questions by Mr. Stone and then followed up by Commissioners Easley and Wilson with regard to the building of plant to meet peak. I'm not sure I recall the specific questions, but I think I can follow up with the question: Is it correct that a Utility needs to build enough capacity to meet its peak demand?

A Yes. It is.

Q If a Utility -- if meeting the peak demand were the only consideration that a Utility had to think about in order to build, what kind of plant would the Utility most likely build?

A I'm afraid your question may be a little bit incomplete, because the Utility determines what type of plant to build based on the energy load expected to be served.

Q Suppose --

A Expected to be served. If your question is do they have to meet the peak demand in a very small number of hours or a relatively small number of hours, what kind of unit would they build?

Q My question is suppose there were only a single peak to be met and no other energy to be sold any other time of the year, what kind of unit would they build?

A I would think they would build the least expensive unit they could, and that would probably be a combustion turbine or possibly a diesel engine or something like that.

Q What if they were going to meet 12 different peaks and there was no other energy usage any other time, what kind of units would they likely build then?

A One each month? One peak each month?

Q Yes.

A They would probably build a peaker.

Q Why is that, why would they build a peaker?

A Because the operating -- because the capital

cost of peaking units are so small relative to the capital costs of intermediate and baseload units that when they only operate a small amount of the time -- that is, when there is only an energy load to be served in a small number of hours, it's the economic choice for the Utility to use a peaking unit rather than for it to spend the capital costs for an intermediate or baseload unit.

Q Well, but very often Utilities don't build peaking units, they build baseload units. Why would they build baseload units if it's cheaper to build a peaking unit?

A Because frequently the addition of a baseload unit to the Utility's system will provide the lowest total revenue requirements over the planning horizon. The lowest -- it's the unit that will be indicated in consideration of all cost characteristics, both capital costs and operating costs. It falls out of the economic analysis component of the Utility's generation expansion planning process.

Q Well, does that suggest that the amount of cost to incur in building a plant is driven by something more than just the need to meet a single peak or 12 single peaks?

A Exactly. That's the exact premise of the

peaker study, peaker methodology approach.

MR. BURGESS: Thank you, Mr. Wright, that's all we have on redirect.

CHAIRMAN WILSON: Do we have any -- we have 607.

MR. BURGESS: Yes, sir, I would ask that the Commission take into evidence Exhibits 350 through 353 and Exhibit 607.

CHAIRMAN WILSON: 350 through 353 have been stipulated, have they not?

MR. BURGESS: Yes, sir, correct.

MR. McWHIRTER: Mr. Chairman, I want to take the witness on voir dire with respect to Exhibit 607.

CHAIRMAN WILSON: All right. This will be an abbreviated version of the prior voir dire you did?

MR. McWHIRTER: I'm extremely hopeful in that respect.

CHAIRMAN WILSON: Okay.

VOIR DIRE EXAMINATION

BY MR. McWHIRTER:

Q Mr. Wright, the rates proposed by TECO in the center column, and let's just use the IS-1 rate, those were proposed by TECO at the outset of the case?

A No, sir, it was during the case.

Q It was during the case?

A Yes, sir.

Q And as I recall, TECO was asking for a rate increase of $125 million?

A I don't recall the total amount of the increase that the Company was requesting.

Q Well, assume, subject to check, that they were asking for $125 million. These rates would have derived the IS-1 customers' share of that, isn't that correct?

A It would certainly have derived the IS customers' share of previous revenue requirement plus the requested increase in the sense of revenues that the Company was asking for.

Q Now in your third column, the one that the equivalent peaker methodology derived, was based on the final increase granted to Tampa Electric, isn't that correct?

A I think that's true.

Q And isn't it true that the final increase granted to Tampa Electric Company was in the range of $25 million, which was some 80% less than the TECO requested?

A I thought it was more than $25 million, but I don't recall.

Q So essentially the rates in the middle column

are the rates required to get one amount of revenue and the rates in the other column are the amount of money that you need to get a substantially lesser sum of revenue.

A Well, I don't think that's exactly right. Mr. Campbell proposed these rates based on some value of service considerations. I believe that these rates proposed by Mr. Campbell were in fact substantially higher than those that the Company originally proposed at the outset of the case and were driven by the perception by Tampa Electric Company that certain customers were attempting to take unfair advantage of the interruptible rates.

Q I understand that they changed the rate structure with respect to these customers. But those rates would derive this customer's share of a substantially larger revenue requirement than the one that was actually granted?

A Because of the timing of the two different proposals that Tampa Electric made during the case for interruptible rates, I'm not sure that's true. Surely, these rates, these rates would have generated -- well, they would have generated whatever revenue they would have generated.

CHAIRMAN WILSON: But isn't that extremely

relevant to understanding the relationship of these rates, what revenue that they would draw?

WITNESS WRIGHT: To some extent. But to the extent that the rate proposals by Tampa Electric weren't exactly cost-based but were driven by long-term historical value of service pricing considerations, which is exactly what was driving them, I think it's less relevant.

CHAIRMAN WILSON: Well, revenue requirement is a large portion of that driver, is it not? And if the revenue requirement is as disparate as Mr. McWhirter has represented it to be, then these numbers in fact are not very comparable, are they?

WITNESS WRIGHT: If the rate revenue requirement numbers are as disparate as he represents, then then they are less comparable, yes.

COMMISSIONER BEARD: Let me take a little different tact, though. If I am a phosphate person out there thinking about cogeneration, do I in fact really care what the revenue requirement derived by TECO is or do I care about what my costs are going to be?

WITNESS WRIGHT: I think you care about what your final bottom line rates are going to be.

COMMISSIONER BEARD: That's what I would, if I was in business, you know, the fact that it's 25% or

50% of the revenue requirement, what I care about is what do I have to pull out of my wallet, I would assume.

CHAIRMAN WILSON: For the purposes, it seems to me, and correct me if I'm wrong. For the purposes of this illustration, you've got to know what revenue requirement is driving either one of these. Theoretically, you could have those rates proposed by TECO could have generated 100% of the increased revenue that they were asking for. It could have derived $25 million.

COMMISSIONER EASLEY: Was there any point --

CHAIRMAN WILSON: That, I don't want to, I'm not testifying --

COMMISSIONER EASLEY: I'm sorry.

CHAIRMAN WILSON: -- I just want to know that in fact the revenue requirement is essential to putting the apparent representation that this exhibit has, to put it in perspective, you need to know what the revenue requirement that drove -- that those numbers drive or that drive these numbers?

WITNESS WRIGHT: Yes, it's certainly at least an important, important determinant.

Additionally, though, Tampa Electric was asking for rates, rate increases to the interruptible

class specially, more or less given the timing of the events, separate from the overall revenue requirement. They were asking for rates geared against -- geared to value of service pricing principles and discounts from the indicated firm service rates.

But you're right, it certainly had something to do with it.

CHAIRMAN WILSON: Commissioner Easley?

COMMISSIONER EASLEY: I was going to ask if during this proceeding, since the equivalent peaker method was eventually used, apparently, was there any evaluation of the rates requested by TECO for the interruptible service using the equivalent peaker method in order to make the comparison prior to the reduction in the revenue requirement and, therefore, reduction in the rate?

MR. BURGESS: You're asking was there something that designed the rates that would show this for what TECO's method would have done for the actual rate increase?

COMMISSIONER EASLEY: Yes. Was there a calculation prior to the reduction in the revenue requirement and therefore prior to that reduction in the rates?

MR. BURGESS: It was not actually a reduction,

it was a reduction in the increase sought. It was actually an increase.

COMMISSIONER EASLEY: It was a reduction in the increase. That would allow you to see what the effect of equivalent peaker method on a like revenue requirement would be?

MR. McWHITER: Not a right revenue requirement, but comparable.

COMMISSIONER EASLEY: Like. Like revenue requirement.

WITNESS WRIGHT: I think that probably would have been available in the cost studies in the case.

COMMISSIONER EASLEY: But you didn't go back when you were preparing this to try and make that comparison? Okay.

COMMISSIONER BEARD: Well, I get to ask a little bit here because I'm confused. A company comes in and asks for X number of dollars. This Commission reviews the data and, based on looking at costs and those things, determines what the real appropriate number is. So if they came in and asked for 1.662 and 215, Okay? And we looked at it and said, "Nah, Nah, too much." And we lower it to what is appropriate. That's part of the reason the revenue requirement went down, isn't it?

MR. McWHIRTER: Let me --

COMMISSIONER BEARD: If I reduced the tariffed amount in the IS-1 tariff from what they requested to what we granted, then the 125 million is going to start on this little road down to 25 million, isn't it?

WITNESS WRIGHT: I don't think so. I think the revenue requirement is determined exogenously from the rate design, separately from the cost allocation in the rate design. It's determined based on how much they had been before they got in rate base and how much of whatever else they got in rate base and what O&M was allowed and what O&M wasn't allowed.

COMMISSIONER BEARD: If I take the same number, same amount, of energy, Okay? And I price it at the rates proposed by TECO and then at the same time I price it by what we approved, which one is going to create a larger amount of revenue?

WITNESS WRIGHT: Obviously, the one proposed by TECO.

COMMISSIONER BEARD: Right. Okay. And I understand --

WITNESS WRIGHT: But the issue about allocation amongst the classes is separate from the overall revenue requirement determination, that's all

I'm saying.

COMMISSIONER BEARD: Never mind, I'm not going to argue.

CHAIRMAN WILSON: Any questions?

MR. McWHIRTER: No, sir. I object to Exhibit 607 as it is presently structured on two bases, if you want to know why.

MR. BURGESS: I would like to know why.

CHAIRMAN WILSON: Just as a matter of mere curiosity.

MR. McWHIRTER: It's comparing apples and oranges. Let me give you a hypothetical example. If you go to the Gulf station and say, "How many gallons of gas will it take me to drive from here to Ocala --"

MR. BURGESS: Maybe I don't want to know.

MR. McWHIRTER: -- He says, "Five gallons."

CHAIRMAN WILSON: And then the fellow only drives to Perry and it only takes a gallon-and-a-half. And he bought Texaco could instead of Gulf. And the Texaco man says, "Well, look, if you'd bought Gulf, it would have required you five gallons, but it only required you a gall

MR. BURGESS: Excuse me. I'm going to object to this. I consider this to be well beyond the bounds of grounds for objection to a particular exhibit. I

think this would be something that Mr. McWhirter would, I don't know, use in brief or argument or testimony, if he were allowed to testify.

CHAIRMAN WILSON: Well, it's clearly not as good as lifting the pay load off the -- at the cape.

MR. McWHIRTER: Maybe my analogy is bad, but the problem is you're comparing apples and oranges and he -- the purpose of this exhibit is to show that the IS customers were better off under the equivalent peaker method than they would have been under Tampa Electric's proposal. But, the answer is they would not have been better off if you'd used the same revenue requirement that TECO was asking for, and so, it's not a fair exhibit to illustrate that point.

MR. BURGESS: I don't think Mr. McWhirter's characterization reflects the testimony that it was offered for, that is that there was a lot going on besides simply the equivalent peaker method. There was a rate increase of some considerable significance and a number of other factors. To the extent that Mr. McWhirter disagrees with the value of the exhibit certainly does not make the objection valid. There's nothing objectionable in the exhibit, and Mr. McWhirter has had the opportunity to cross examine.

MR. McWHIRTER: It's woefully.

CHAIRMAN WILSON: Mr. McWhirter, I'm surprised you didn't object because of the compotence of the evidence. This is not the exhibit that was from the case, is it?

MR. BURGESS: I'm sorry, what?

CHAIRMAN WILSON: This exhibit is derived from information that was in the case. It's not an exhibit from the case.

MR. BURGESS: That's correct, at least as far as I know.

CONTINUED REDIRECT EXAMINATION

BY MR. BURGESS:

Q Mr. Wright, excuse me, is this an exhibit that was actually offered in the case?

A No, it was derived from exhibits in the case.

MR. BURGESS: It might be beneficial to ask the witness the purpose for which he offered the exhibit.

CHAIRMAN WILSON: I think that was the first question you asked him, and he answered it.

Mr. Pruitt?

MR. PRUITT: It is generally represented in the exhibit that the figures are taken from orders of the Commission. If that is a fact, the Commission has the authority to take official notice of its own orders

and what is contained in them. The only thing, you can't take official notice of the evidence that was adduced to produce the order though.

CHAIRMAN WILSON: I don't think this comes from the order. This comes from an exhibit.

MR. PRUITT: If it comes from an exhibit --

CHAIRMAN WILSON: Comes from a revised tariff sheet that we approved and an exhibit by Mr. Campbell in testimony before the Commission.

COMMISSIONER EASLEY: Mr. Chairman, before you rule, whichever way you rule, I would like to see the comparison that I was talking about. Now whether that's to a replacement Exhibit 607 or a supplemental late-filed, I don't know, but to give you an indication of the fact that I don't think this is enough information, I would like to request the additional information, and that is the straightforward comparison of the equivalent peaker method based on the -- either the first rates that TECO asked for or the rates that ultimately were granted by the Commission. So that I can see what in the dickens we are comparing.

CHAIRMAN WILSON: I'm going to allow the -- allow the exhibit to be admitted into evidence. I think Mr. McWhirter has had an opportunity to impeach the exhibit. And it will stand for it stands for.

(Exhibit No. 607 was received into evidence.)

COMMISSIONER EASLEY: Well, then, do I need to ask for a separate late-filed?

CHAIRMAN WILSON: If you would like it, yes. Mr. Wright will be back on the stand in rebuttal, I believe, will you not?

WITNESS WRIGHT: Yes, sir.

COMMISSIONER EASLEY: Perhaps he can bring it back at that time.

WITNESS WRIGHT: I'll try.

COMMISSIONER EASLEY: You understand what I'm asking for?

WITNESS WRIGHT: What the rates would have been based on the requested revenue requirement.

COMMISSIONER EASLEY: To make that same comparison but using the same revenue requirements.

CHAIRMAN WILSON: Anything further?

MR. PALECKI: Commissioner, Staff was instructed to point out the appropriate time to revisit the argument concerning the proposed late-filed for Mr. O'Sheasy, which was a rerun of the cost of service. We're prepared to do that now or first thing in the morning, whichever is the Commission's pleasure.

CHAIRMAN WILSON: Are you still requesting the exhibit?

MR. PALECKI: Yes, we are.

CHAIRMAN WILSON: We'll do it in the morning.

Any further redirect?

MR. BURGESS: No, sir.

MR. VANDIVER: What time will we reconvene this hearing tomorrow?

CHAIRMAN WILSON: I was about to get to that. Anything further this afternoon? This evening?

We have a swearing-in ceremony at 9:00 o'clock in the morning for the new Commissioner, and we will be in an Agenda Conference immediately following that, and my expectation is we should be through with that my noon.

MR. BURGESS: We have the next witness. They'll be in this evening, so we'll be monitoring it if you want to start agenda early.

CHAIRMAN WILSON: What I want to do is start this hearing back 45 minutes after the conclusion of Agenda Conference or 1:00 o'clock, whichever comes first.

MR. McWHIRTER: Whichever comes later?

CHAIRMAN WILSON: No, the Agenda, whether it's through or not, will be over by noon.

I would ask that you straighten up these benches since we'll be doing -- or the tables, since we

will be doing Agenda Conference in the morning.

Mr. Wright, thank you very much. You may step down.

(Witness Wright excused.)

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MR. BURGESS: Can we leave things here?

CHAIRMAN WILSON: If you leave things back there on that back table, that would be fine and/or under that table, I think there's room there.

MR. PALECKI: Can we take care of the cleaning up first thing in the morning?

CHAIRMAN WILSON: Sure, you can do it first thing in the morning, just be sure you have it done by about quarter of 9:00. Thank you.

(Thereupon, hearing adjourned at 7:35 p.m., to reconvene at 1:00 p.m., Tuesday, June 19, 1990, at the same location.)

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