BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

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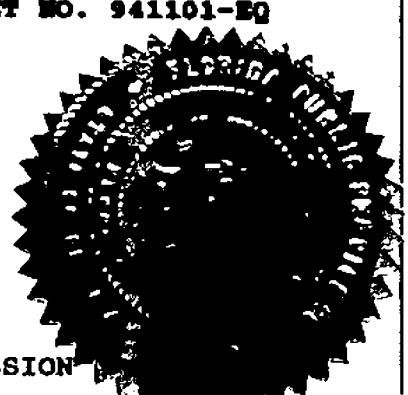
| In the Matter of | DOCKET NO. 941101-EQ |
| Petition for determination that plan for curtailing purchases from qualifying facilities in minimum load conditions is consistent with Rule 25-17.086, F.A.C., by FLORIDA POWER CORPORATION. | |



THIRD DAY - AFTERNOON SESSION

VOLUME 7

Pages 876 through 1026

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|---|---|
| PROCEEDINGS: | HEARING |
| BEFORE: | CHAIRMAN SUSAN F. CLARK<br>COMMISSIONER J. TERRY DEASON<br>COMMISSIONER JULIA F. JOHNSON<br>COMMISSIONER DIANE K. KIESLING<br>COMMISSIONER JOE GARCIA |
| DATE: | Wednesday, May 10, 1995 |
| TIME: | Commenced at 9:30 a.m.<br>Concluded at 1:25 p.m. |
| PLACE: | FPSC Hearing Room 106<br>Fletcher Building<br>101 East Gaines Street<br>Tallahassee, Florida |
| REPORTED BY: | JOY KELLY, CSR, RPR<br>Chief, Bureau of Reporting<br>Official Commission Reporter |

APPEARANCES:

(As heretofore noted.)

# I N D E X

## MISCELLANEOUS - VOLUME 7



## WITNESSES - VOLUME 7

EXHIBITS - VOLUME 7

| NUMBER | | IDENTIFIED | ADMITTED |
|---|---|---|---|
| 16 | (Brousseaux) LDB-1 and LDB-2 | 880 | 922 |
| 17 | (Southwick) HIS-5 through HIS-10 | 925 | 1017 |
| 18 | (Orlando Cogen) Auburndale Settlement Agreement | 1022 | 1022 |

PROCEEDINGS

(Transcript continues in sequence from Volume 6.)

CHAIRMAN CLARK: Ms. Brousseau.

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LINDA D. BROUSSEAU.

was called as a rebuttal witness on behalf of Florida Power Corporation and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. McGEE:

Q Would you give us your name and business address for the record, please?

A My name is Linda Brousseau. My address is P. O. Box 14042, St. Petersburg, Florida.

Q What's your capacity with Florida Power?

A I'm the Manager of Power Supply at Florida Power's Energy Control Center.

Q Do you have before you a document entitled, "Rebuttal Testimony of Linda D. Brousseau"?

A Yes, I do.

Q And is that a document consisting of 27 pages and two attached exhibits?

A Yes, sir.

Q Was the prepared rebuttal testimony prepared by you as your rebuttal testimony for this proceeding today?

A Yes.

Q Do you have any additions or corrections that you'd like to make to your prepared rebuttal testimony?

A No, I do not.

Q If you were to ask you the questions today that are contained in your prepared testimony, would your answer be the same?

A Yes, it would.

MR. McGEE: Madam Chairman, we ask that Ms. Brousseau's prepared testimony be inserted into the record as though read.

CHAIRMAN CLARK: Ms. Brousseau's rebuttal testimony will be inserted into the record as though read.

MR. McGEE: The two exhibits that are attached to your testimony as LDB-1 and LDB-2, were those prepared by you or under your direct supervision and control?

A Yes, they were.

Q Do you have any additions or corrections that you would like to make to either of those exhibits?

A There are none.

MR. McGEE: Madam Chairman, we'd ask they be marked for identification.

CHAIRMAN CLARK: They'll be marked as Exhibit 16.

(Exhibit No. 16 marked for identification.)

FLORIDA POWER CORPORATION

DOCKET NO. 941101-EQ

# REBUTTAL TESTIMONY OF LINDA D. BROUSSEAU

## I. INTRODUCTION AND PURPOSE

**Q. Please state your name and business address.**

A. My name is Linda D. Brousseau. My business address is Post Office Box 14042, St. Petersburg, Florida 33733.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Florida Power Corporation ("Florida Power" or "the Company") as Manager of Power Supply.

**Q. Please describe your duties as Manager of Power Supply.**

A. I am responsible for the day-to-day scheduling of generation and bulk power interchange resources to meet Florida Power's system demand in a reliable and economic manner. I represent Florida Power as a member of the Operating Committee of the Florida Electric Coordinating Group on which I am the designated State Capacity Emergency Coordinator. I also participate in the Operating Committee of the Southeast Electric Reliability Council as the Florida Power alternate member. In these capacities I also serve on various subcommittees and task forces as needed.

**Q. Please describe your educational and professional experience.**

A. I received a Bachelor of Science Degree in Chemical Engineering from the University of South Florida in 1985.

During the 1981-1985 time period, I was a Co-operative Education student at Florida Power. I performed a variety of assignments in Florida Power's Fossil Engineering Department and also worked at Florida Power's Anclote Plant.

Upon graduation in 1985, I returned to Florida Power as an Engineer 1 in the Engineer In Orientation Program (EIO). I worked again in Fossil Engineering and at the Bartow Plant. My duties included preparation of engineering studies and related activities. At the Bartow Plant, I coordinated and supervised two major projects during a unit maintenance outage.

In 1986, I became a Test Engineer in Florida Power's Plant Performance Department. My duties included the coordination, preparation and testing of fossil steam unit performance.

In 1987, I was promoted to the position of Energy Efficiency Programs Coordinator in Florida Power's Customer Service and Marketing Department. I provided staff support to field engineers on all of Florida Power's residential and commercial conservation programs.

In 1988, I was promoted to Project Engineer at Florida Power's Energy Control Center. My primary responsibilities were to perform daily operational and short-term planning studies to support the activities of the Power Supply Department.

I was promoted in 1991 to Supervisor of Power Supply Scheduling at Florida Power's Energy Control Center. In that capacity I was responsible for the development of the daily system generation and interchange schedules.

In 1992, I was promoted to Supervisor of Power Supply at Florida Power's Energy Control Center. The responsibilities in that position were the same as those I have today; however, I was named Manager of Power Supply in 1995.

**Q. Do you hold any professional certifications or licenses?**

A. I am a registered Professional Engineer in the State of Florida. I became registered in 1991.

**Q. Are you sponsoring any exhibits with this rebuttal testimony?**

A. Yes. I am sponsoring Exhibits 12 (LDB-1) and 13 (LDB-2).

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

A. I will respond to the supplemental testimony filed on April 25, 1995 by Mr. Kenneth Slater on behalf of Orlando Cogen, L.P. and Pasco Cogen,

Ltd. (jointly "OCL/Pasco"). Mr. Slater's testimony questions the Unit Commit simulations which Florida Power developed for each of the first seven curtailment events and the conclusion that negative avoided costs would have existed during each event in the absence of curtailments. The results of those simulations were discussed in the direct testimony of Florida Power witness Henry I. Southwick. Mr. Slater advances his own interpretation of what the Unit Commit runs should have shown, in an effort to establish that negative avoided costs would not have existed for the seven events.

I will respond to Mr. Slater's assertions and results, and I will present and discuss a set of amended computer simulations which we have prepared as a result of our review of Mr. Slater's comments. I will show that OCL/Pasco have not in any way undermined the credibility of the Company's original avoided cost conclusions. The revised simulations continue to demonstrate that negative avoided costs would have been incurred if the QFs were not curtailed.

## II. GENERAL REBUTTAL TO OCL/PASCO'S SUPPLEMENTAL TESTIMONY

**Q. Please begin by summarizing Florida Power's direct evidence on the question of negative avoided costs.**

A. As explained in Mr. Southwick's direct testimony (at pages 35-40) Florida Power used three ways to illustrate that, when a minimum load condition is approaching, its system operating personnel can predict

with a high degree of confidence (if not certainty) that cycling off a coal unit in order to continue the purchase of QF energy would cause the Company to incur higher system costs than it would incur if it curtailed the QF purchases and continued to operate the coal unit at its minimum generation level.

Q. What was the first of these three illustrative approaches?

A. First, we explained in a conceptual way what I believe to be a self-evident proposition -- that cycling off a baseload unit to continue QF purchases necessarily will produce negative avoided costs because the combination of unit start-up costs and replacement power costs must produce a negative avoided cost whenever they exceed the fuel savings from not generating the energy at issue with Company units. We noted that both the FERC and this Commission seemed to accept this proposition as a given when they explained the rationale for their curtailment rules. We also showed that the negative avoided cost impacts can only be increased (*i.e.*, become *more* negative) when one considers the additional per cycle unit impact costs described by Mr. Lefton.

Q. What was the second approach used by the Company to illustrate the negative avoided cost phenomenon?

A. In the second approach, we related the clear conceptual proposition to the seven initial curtailment events to illustrate that the proposition rang true for each event. We did this by examining the actual amount of

excess generation on each of the seven occasions, the amount of baseload generation that would have been curtailed to balance the generation and load without curtailments, and the net avoided cost impacts considering fuel savings, unit start-ups, replacement power costs and unit impact costs. For each of the seven events, we established that cycling off a coal unit to prevent QF curtailments would have cost the Company (and its ratepayers) more money than under the curtailment option.

**Q. Please describe the third illustrative approach.**

A. Although each of the first two methods of evaluating negative avoided costs seemed logically unassailable, we opted to develop still another way to illustrate the point. This led to the Unit Commit simulations which were described in Mr. Southwick's testimony and challenged in Mr. Slater's testimony. Those simulations were an attempt to illustrate after-the-fact what we knew and were forced to act on before-the-fact -- that the Company would incur greater costs if our dispatchers cycled off baseload generation instead of requesting curtailments in accordance with the Curtailment Plan.

We attempted to illustrate this effect after-the-fact by using readily available Unit Commit runs which had been developed during the normal course of business for as-available energy payment purposes. This "Base Case" set of computer runs was chosen as a reasonable proxy for how the system was operated with the actual curtailments that were

requested. We then compared the Base Case runs to a comparable set of "Change Case" computer runs which were developed to approximate system conditions as if no QF curtailments had been made. A comparison of the Base and Change Cases served as a further corroborating illustration of the principle that we knew to be true -- failure to curtail would have resulted in negative avoided costs for each of the seven curtailment events.

**Q. What are your general impressions of Mr. Slater's response to the Company's analysis of the avoided cost issue?**

A. I will repeat a point made by both Messrs. Southwick and Dolan. The OCL/Pasco testimony reveals much more in what it *doesn't* say than in what it does say. Neither Mr. Shanker nor Mr. Slater has offered one word of testimony to dispute the basic conceptual point made by Florida Power -- *i.e.*, that we can predict with great confidence the likelihood of negative avoided costs during minimum load conditions whenever the choice is to cycle off baseload generation instead of making QF curtailments. In fact, Mr. Shanker accepts this proposition as being true when he says that the curtailment rules were intended to address conditions "during which a utility would, absent curtailment, have to turn off its own base load generation due to QF purchases, resulting in net increased operating costs (i.e., "negative avoided costs"). (Shanker, page 24).

Similarly, neither Mr. Shanker nor Mr. Slater mentioned or refuted Mr. Southwick's second analytic method for illustrating the negative avoided cost problem -- that is, the case-by-case manual quantification of unit start-ups, replacement power costs and unit impact costs, as described at pages 37-39 of Mr. Southwick's direct testimony and shown numerically in his Exhibit 16 (HIS-3), pages 2 of 3.

Because OCL/Pasco were unable to fault the principle established by Florida Power (and accepted by both the FERC and this Commission), Mr. Slater turned his attention to a piecemeal criticism of the Company's illustrative Unit Commit simulations. This shift in focus is simply a back-door attempt to shed doubt on the undisputed principle by attempting to poke holes in one of the illustrative examples offered by Florida Power.

**Q. Has Mr. Slater cast any real doubt on the Company's ultimate avoided cost conclusions?**

A. No. Even ignoring the fact that Mr. Slater offered no criticism concerning much of Florida Power's avoided cost testimony, his Unit Commit criticisms do not prove his conclusion that the Company was wrong in its evaluation of the negative avoided cost issue. Mr. Slater has suggested a number of changes to the Unit Commit runs. I will discuss each of his proposed changes individually, but I note initially that only one group of his proposed changes, having to do with the correction of minor inconsistencies in the input data for the computer

runs, has any merit at all. Moreover, I would like to re-emphasize the limited purpose for which these simulations were intended in this case, *i.e.*, to illustrate and thereby corroborate the basic point which the Company amply established by other means and which OCL/Pasco have not refuted.

I would also like to emphasize the fact that computer programs do not run the Florida Power system or any other utility system. People run the system using the information they can glean from computers and other sources coupled with their extensive knowledge of system capabilities, reliability issues, cost constraints, and current as well as projected operating conditions. Before a minimum load condition materializes, the Company's system operating personnel have access to planning data, weather service forecasts, real-time information on system conditions, and the hands-on experience of seasoned system operators. When a problem is expected to arise, corrective actions must be taken up-front, based on expected outcomes. This is true of all day-to-day system operating decisions. For example, the state of Florida uses forward-looking procedures to deal with capacity shortages through a specific plan approved by this Commission and implemented through the Florida Electric Coordinating Group. The need for forward-looking decisionmaking is no less critical with respect to curtailment decisions. The Curtailment Plan operates, as it must, from the information which can be reasonably gathered by the system operating personnel *before* the minimum load problem is allowed to materialize, and from the

knowledge that cycling off baseload generation would result in increased net operating costs.

The Unit Commit simulations are not, and could not be, exact snapshots of what happened on the system with curtailments and what would have happened in the hypothetical world where no curtailments took place. Rather, they attempt to simulate reasonable operating scenarios in order to give an unbiased picture of the expected directional effect on avoided costs of curtailing versus not curtailing QF energy deliveries. The biggest difficulty in Mr. Slater's testimony is that he proposes to manipulate the Unit Commit cases in ways that bring them far further from the goal of reflecting actual conditions rather than closer.

**Q. Has Florida Power developed new Unit Commit simulations in response to Mr. Slater's testimony?**

A. Yes. As I have said, Mr. Slater did correctly identify one type of error which we acknowledge and have therefore corrected. Also, in reviewing the original Unit Commit runs, we discovered several other items which we have adjusted to make the simulations more accurate and realistic. I will discuss these later in my testimony.

**Q. Please respond to Mr. Slater's claim that, when "properly" developed, the Unit Commit runs would show a positive avoided cost for each of the seven curtailment events.**

A. Mr. Slater is wrong. He could only reach this conclusion by manipulating data in unreasonable and unrealistic ways. When we prepared corrected Unit Commit cases, they again corroborated the conclusion that, without curtailments, Florida Power would have incurred negative avoided costs during each of the curtailment events. The results of the revised Unit Commit runs are summarized in my Exhibit 16 (LDB-1).

I will explain why these Unit Commit runs make sense and why Mr. Slater's alternative runs do not make sense. However, the Commission should not lose sight of the fact that OCL/Pasco have focused their efforts and criticisms exclusively on a battle over the minute details of computer simulations that are, in fact, only one of several illustrations offered by the Company to show the negative avoided cost phenomenon.

## III. REBUTTAL TO MR. SLATER'S CRITICISMS OF THE UNIT COMMIT SIMULATIONS

**Q. What changes did Mr. Slater make to the Unit Commit simulations originally presented in Exhibit 7 (HIS-3), page 1 of 3?**

A. Mr. Slater made four types of changes to these simulations: (1) changes to the computer source code for the Unit Commit program; (2) correction of inconsistencies in the input data for individual cases; (3) changes that altered the dispatch of units in several of the cases; and

(4) a change that Mr. Slater refers to as "longer time frame analyses." Each of these groups of changes needs to be considered individually.

**Q. Did Mr. Slater's changes to the Unit Commit source code have any significant effect on the results of the simulations?**

A. No. Mr. Slater revised a number of source code statements to accomplish what he has referred to as "clean up" measures needed to convert Unit Commit from a mainframe to a PC computing environment. However, these changes are irrelevant to Mr. Slater's criticisms because the Unit Commit runs produce virtually the same results with and without these changes. They should therefore be ignored in this case.

**Q. Turning to Mr. Slater's second category of adjustments, what inconsistencies did he claim to identify in the input data for individual Unit Commit cases?**

A. Mr. Slater utilized a program to automatically compare the input data used for the Base Case versus the Change Case in each of the seven simulations. The results of his automated comparison led him to conclude that there were three differences in input data that had been introduced inadvertently during the original development of these simulations: (1) start-up fuel for coal units appeared to be missing from five cases, including January 1 (Change Case), January 2 (Change Case), January 14 (Base and Change Cases), and January 30 (Change Case); (2) in the January 2 simulation the starting point for the Crystal River 5 heat rate curve was set at 300 MW in the Base Case versus

150 MW in the Change Case; and (3) in the October 19 simulation the University of Florida cogeneration unit showed a 10 MW minimum operating level in the Base Case and a 12 MW minimum operating level in the Change Case in that unit's heat rate curves.

**Q. What did Mr. Slater change in the input data to correct for these inconsistencies?**

A. Mr. Slater made the following adjustments: (1) he added start-up fuel for coal units in all five of the cases listed above; (2) in the January 2 simulation, he set the starting point for the Crystal River 5 heat rate curve at 300 MW in the Change Case to conform to the number shown in the Base Case; and (3) in the October 19 simulation, he set the minimum operating level for the University of Florida unit at 10 MW in the Change Case. again to conform to the number shown in the Base Case.

**Q. Was Mr. Slater correct in believing that he had identified inconsistencies in the input data for individual computer runs?**

A. Yes and no. Our review has determined that start-up fuel costs were inadvertently omitted from the input files provided to Mr. Slater for the January 2 Change Case and the January 14 Base and Change Cases, but that the corresponding simulations performed by the Company and used to support Exhibit 7 (HIS-3), page 1 of 3, *did* include the correct start-up fuel costs for the coal units.

With this exception, the Company has verified that the remaining inconsistencies identified by Mr. Slater did exist in the runs performed by the Company as reflected in Exhibit 7 (HIS-3), page 1 of 3, and as provided to Mr. Slater. The Company agrees that the start-up fuel costs should be included in those cases where the costs were missing. However, we disagree with Mr. Slater's "corrections" for the other two inconsistencies which he identified. The minimum capacity on the heat rate curve for Crystal River 5 should be consistently reflected in the simulations as 150 MW, rather than 300 MW as Mr. Slater assumed. Similarly, the University of Florida unit heat rate curve should be shown consistently with its minimum capacity level of 12 MW, rather than 10 MW as Mr. Slater assumed. The Company has used the correct numbers on its amended Unit Commit runs as I will discuss later.

**Q. In his third category of adjustments, what additional changes did Mr. Slater make to alter the dispatch of units in several of the Unit Commit cases?**

A. Mr. Slater made three types of changes that affect unit dispatch. First, in several of the Base Case runs he unilaterally removed the must-run status of several units thereby cycling off units that actually were shown to be on-line in the Company's Base Case runs. Second, in three of the Change Case runs, Mr. Slater elected to eliminate an off-on cycle for Crystal River 1. Third, for January 14, Mr. Slater put Crystal River 2 on maintenance status in both the Base and Change Cases.

**Q. Why did Mr. Slater remove the must-run status of units in his Base Case runs when they were shown to be operating in the Company's Base Case runs?**

A. In Mr. Slater's direct and supplemental testimony he noted the existence of "excess" generation in several of the Base Cases prepared by the Company. He improperly construed this as an opportunity to eliminate the perceived excess generation condition in these Base Case runs by allowing a baseload unit to cycle off although the Company had shown the unit to be operating during that period.

**Q. Do you agree with the manner in which Mr. Slater eliminated the perceived excess generation condition?**

A. No. I strongly disagree with these changes by Mr. Slater. The baseload units that were allowed to be cycled off by Mr. Slater were actually on-line and operating during the periods in question. Given that the purpose of the Base Cases was to approximate what actually occurred on the Florida Power system during the time period surrounding the curtailment events, it is not appropriate to introduce changes that depart significantly from actual conditions under the guise of correcting a problem with the runs.

The entire purpose of these simulations was to evaluate the curtailment of QF energy as an alternative to cycling off baseload units. Mr. Slater has defeated this purpose by creating Base Cases that erroneously show

operating units to have been cycled off when in fact they were not. For example, two of the modified scenarios prepared by Mr. Slater (for the January 8 and January 14 events) include unit shutdowns and cycling costs that are identical for both the Base Cases and Change Cases. Clearly, it is impossible to carry out the intended comparison if one of the alternatives at issue is falsely assumed to exist identically in both cases.

Having reviewed the Unit Commit simulations in light of Mr. Slater's testimony, the Company has determined that the perceived energy imbalances noted by Mr. Slater can be easily explained if one understands the underlying formulation of these Unit Commit runs. Once understood, it is clear that no adjustments are needed because there is no error in need of correction.

**Q. Please explain the nature of these apparent excess generation conditions.**

A. The Company has identified two primary factors contributing to the excess generation conditions reported in the Unit Commit runs. The first cause resulted from the fact that baseload generating units in some instances were actually operated *below* their normal minimum generation levels in an effort by our system operators to mitigate the need for curtailments. This is consistent with the procedures in the Curtailment Plan, but the computer simulations did not correctly reflect these mitigation efforts. Instead, the simulations assumed that each

unit was operating at a level no lower than its normal minimum. This discrepancy contributed to the appearance of excess generation and has been corrected in our amended Unit Commit runs, as discussed later in my testimony.

The second contributing factor to the apparent excess generation conditions is the fact that economy sales were excluded from the runs because the cases were derived from as-available billing data. Economy sales have been reviewed and the Company has concluded that it is appropriate to continue to exclude economy sales (with the sole exception of Florida Power's sales to the Southeastern Power Administration's Carters Dam Project) as discussed later in my testimony. Taken together, these factors account for substantially all of the excess energy conditions identified by Mr. Slater.

**Q. Mr. Slater suggested in his direct testimony that generation excesses of 11 MW or so presented "significant problems" with the Company's Unit Commit runs. Is there any merit to this contention?**

A. No. Even apart from the reasons for apparent energy imbalances that I just explained, I would not consider an overall imbalance of 11 MW or so to be a problem, let alone a significant problem. Given the imprecision in predicting the magnitude of an excess generation condition in advance of the event and the lack of operating control over the QF units, no one should expect that we can always accomplish an exact match between generation and load throughout the minimum load

period. In fact, 11 MW is well within the range of normal control error. Under governing NERC criteria, Florida Power is allowed an operating margin of 30 MW above or below an Area Control Error ("ACE") of zero. Turbine valve fluctuation on generating units, meter errors, and similar operating imprecision can account for discrepancies of 11 MW of more.

**Q. What is your response to Mr. Slater's last assertion that Florida Power has used an improper short time frame of analysis to evaluate the curtailment events?**

A. Florida Power strongly disagrees with Mr. Slater's assertion. We find the entire concept of a "longer time frame analysis" as advocated by Mr. Slater to be arbitrary, illogical and self-serving. As Mr. Southwick explained in his rebuttal, Florida Power's analyses all were based on a time frame of sufficient length to capture the significant costs related to each curtailment event.

It should be stressed that Mr. Slater is not merely proposing that the comparative cases be run for longer time periods in order to capture possible cost impacts that could be overlooked by a shorter time frame. Mr. Slater is actually proposing that the study analyze the maximum curtailment of QF energy as if Florida Power had asked to have the maximum level of curtailment sustained for an entire week rather than for a few hours as was actually the case. In other words, Mr. Slater maintains that the evaluation must be based on an event that did not take place, that is dramatically different from the curtailment event that

did take place, and that would not have taken place under any plausible set of circumstances. Mr. Slater's analysis would include the curtailment of QF energy around-the-clock and through on-peak periods -- actions that the Company has never taken and does not contemplate taking.

**Q. In what way is Mr. Slater's longer time frame analysis self-serving?**

A. Mr. Slater's proposed longer time frame analysis could have only one underlying purpose and rationale. By arbitrarily proposing to expand the length of the assumed curtailment event, many hours would be included in the analysis during which the avoided cost of the curtailed energy is undeniably positive. Given that the length of the actual curtailment event is typically only a few hours, the hours that would be included in Mr. Slater's suggested approach during which the avoided cost is positive would greatly outnumber the hours during which the avoided cost is negative. The dominant effect of artificially including many hours when the avoided cost is positive makes the final result virtually certain -- it would be impossible to demonstrate negative avoided costs for an entire week in order to justify a curtailment event with an actual duration of only a few hours; it would also be completely inappropriate.

## IV. RESULTS OF FLORIDA POWER'S CORRECTED UNIT COMMIT SIMULATIONS

**Q. Why has the Company prepared a revised set of Unit Commit simulations?**

A. As I noted earlier, Mr. Slater was correct on a couple of his points. We wanted to correct for those oversights. In doing so, we also discovered that we should make several other adjustments to the data in order to better accomplish the original objective of having a set of comparisons that would generally approximate actual operating conditions in the Base Case. Consequently, we amended our simulations of the seven curtailment events, and I am presenting a summary of these results in Exhibit 16 (LDB-1). My Exhibit 16 (LDB-2) summarizes the revisions which we made in the new runs.

**Q. How have you responded to the changes proposed by Mr. Slater?**

A. As I alluded to earlier, we have made the following adjustments to eliminate the inconsistencies in the input data among Base and Change Cases: (1) start-up fuel for coal units was added to the two Change Cases (January 1 and 30) where this data actually was missing; (2) in the January 2 simulation, the starting point for the Crystal River 5 heat rate curve was set at the correct level of 150 MW in the Base Case; and (3) in the October 19 simulation, the minimum operating level in the heat rate curve for the University of Florida unit was changed to the correct level of 12 MW in the Base Case.

**Q. What additional refinements have been made to the Company's amended simulations?**

A. The following six types of refinements have been included in the revised simulations: (1) pre-arranged off-system sales to the Carters Dam Project which occurred during two of the minimum load events have been included; (2) economy purchases which occurred during the time periods covered by the cases were excluded; (3) the initial operating status of units has been revised to reflect the actual status of the units at the start of each simulation; (4) minor adjustments have been made to the level of curtailments in each simulation because of differences in the curtailment amounts requested and actually received; (5) the minimum operating levels of units were adjusted to reflect the fact that the Company was able to reduce some of the baseload units below their normal minimum generation levels during some of the curtailment events; and (6) several miscellaneous adjustments were made to improve the accuracy of the simulations. These refinements are summarized in my Exhibit 16 (LDB-2).

**Q. Why were the pre-arranged sales to the Carters Dam Project included in the simulations?**

A. As I discussed previously, to create a starting point for the Unit Commit simulations, we used the after-the-fact runs regularly prepared by the Company to compute the as-available energy payments to QFs. Mr. Southwick's rebuttal testimony explains that these payments are calculated after considering interchange purchases but before

considering interchange sales. Although this is the accepted methodology for purposes of calculating as-available energy payments, we have concluded that it is not appropriate for present purposes with respect to the Carters Dam sales.

All economy sales were previously excluded from the simulations based on the rationale that the Company could not have anticipated or planned to accommodate those sales. However, the sales to the Carters Dam Project are different insofar as those sales are planned and pre-arranged, and generally can be relied upon as overnight sales for up to a full week. As a result, it is appropriate to reflect those sales in the Unit Commit runs in the same manner as they would have been factored into our before-the-fact planning decisions.

**Q. Why do the amended simulations exclude economy purchases?**

A. Hourly economy purchases, like economy sales, are scheduled on short notice and cannot be anticipated or relied upon for planning purposes. As a result, these purchases cannot be treated as an available resource when scheduling to meet projected system loads. It is therefore appropriate to exclude these purchases from the Unit Commit runs to be consistent with information that was known and available at the time that actual before-the-fact planning decisions were made.

**Q. Why was the initial operating status of units adjusted in the amended simulations?**

A. In the course of responding to Mr. Slater's testimony, we discovered that the initial operating status of the Company's units that were shown in the input data did not consistently reflect the actual prior operating status of the units. As a result, the start-up cost of these units did not correctly reflect the actual length of time that a unit had been cycled off prior to being restarted. To correct for this inaccuracy, the data for the initial operating states of all units was reviewed and adjusted for each of the simulations.

**Q. Why were some of the curtailment amounts adjusted in the amended simulations?**

A. In the original runs, the hourly net interchange increment representing the amount of curtailed energy was based on the lesser of the actual amount of energy curtailed or the requested amount of energy curtailed.

In reviewing the curtailment events, we determined that there were essentially two modes of overall response to curtailment requests. In the first type, QFs either responded consistently as requested, or they responded with curtailments that individually may have been greater or less than the requested curtailments. In these cases, the net effect of all QF responses was substantially in compliance with the curtailment request. In the second type, certain QFs either could not comply with the requested amount of curtailment for technical reasons or chose to over-comply for other reasons. On occasion, the individual instances of over-compliance resulted in total curtailments that were substantially

larger than the amounts that the Company requested or needed to match generation and load.

We have determined that the method of assuming that the curtailed amount was the lesser of the requested amount or the actual amount curtailed was unnecessary for the cases in which the actual total curtailment amount closely approximated the requested amount. Therefore, in this case the actual amount of curtailments has been used in the simulations. By contrast, there were a few instances of the second type which typically resulted from a QF opting to go completely off-line in response to a curtailment request. These instances resulted in substantial total over-compliance and must be viewed as aberrational. They should therefore be excluded from the analysis of the curtailment event because they overstate the total requested curtailment amounts. For these few cases, we have retained the method of assuming that the curtailed amount was the lesser of the requested curtailment or the actual curtailment.

**Q. Why were the minimum operating levels of units adjusted to more accurately reflect the actual levels of operation during the curtailment events?**

A. As I noted previously, the Company was able to mitigate curtailments on several occasions by operating baseload generating units at levels below their normal minimum generation levels. The original computer runs ignored these extra efforts and incorrectly assumed that the units

were all operating no lower than their normal minimums. For example, Crystal River 2 has a normal minimum operating level of 140 MW, but may have been operating at 135 MW or 130 MW during a particular curtailment hour. This type of discrepancy has been corrected in our revised Unit Commit simulations.

**Q. What were the other miscellaneous refinements which the Company made to the amended Unit Commit runs?**

A. We made three other miscellaneous refinements to improve the accuracy of the simulations. These were: (1) correction of the normal minimum generation level for the Crystal River 4 unit; (2) correction of the must-run status of two units; and (3) correction of minor discrepancies in the must-take amounts from the Southern Companies.

The first change was needed to reflect the fact that Crystal River 4 has a normal minimum generation level of 300 MW, but that the unit's minimum level was erroneously shown as 150 MW in several of the runs. The second change was needed to correctly show that Suwannee Unit 3 was in a must-run status on January 30, 1995, even though that unit was manually removed from service during the curtailment event, and to correctly show that Crystal River 4 should not have been in a must-run status in the Change Case for January 2, 1995. The third type of miscellaneous refinement was needed to reflect very small discrepancies in the actual amounts of must-take purchases from the Southern Companies during four of the curtailment events.

All of the miscellaneous refinements were appropriate to improve the accuracy of the Unit Commit simulations.

**Q. What are the results of your amended Unit Commit simulations of the seven curtailment events?**

A. The results of these simulations are summarized in Exhibit 16 (LDB-1). As with the prior simulations included in Mr. Southwick's testimony, the amended Unit Commit runs continue to illustrate that the Company would have incurred negative avoided costs in each of the seven curtailment events if it had not requested and obtained QF curtailments in accordance with the Curtailment Plan.

**Q. Is it more likely that the revised Unit Commit simulations understate or overstate the magnitude of the negative avoided cost impacts of not curtailing?**

A. I consider it much more likely that they understate the extent of the negative impact. For example, the Unit Commit runs do not reflect all of the per cycle unit impact costs identified by Mr. Lefton and described by Mr. Southwick. Also, the runs assume that once a unit is cycled off, it will be available for service immediately after its minimum down time. It is not uncommon for restarts to take longer than the minimum down times reflected in Unit Commit, in which case the cycling costs would become larger.

These examples are not intended to be all-inclusive, yet they suggest that our illustration of negative avoided cost errs, if at all, on the side of understating, not overstating, the negative avoided cost phenomenon.

**Q. Does this conclude your rebuttal testimony?**

A. Yes.

Q (By Mr. McGee) Ms. Brousseau, would you give as a summary of your testimony, please?

A Okay. Florida Power has shown in three separate ways for each curtailment to date that Florida Power would have experienced negative avoided costs if the QF energy had not be curtailed. Two of those three methods are described by Mr. Southwick and do not involve computer simulations. Florida Power used the unit commit model as the third method to illustrate the effects on avoided cost that would have been seen had the QF energy not been curtailed. All three methods clearly show that the negative avoided costs would occur if the Company continued to accept the QF energy and cycled off a baseload coal unit in order to match the generation and load for a few hours.

Mr. Slater's testimony criticized Florida Power's unit commit simulations and produced his own set of runs to show that the Company would not have experienced negative avoided cost. This is not true.

Mr. Slater did point out on error in the data sets that I did agree with and corrected. The error was inconsistent data in the base and change cases of several runs. He made several other changes in his simulations that I don't agree with. He has indicated problems with some items that are simply not problems.

It's important to note that these unit commit

simulations cannot be an exact snapshot of what happened on the system with and without the QF energy curtailments. They are operating scenarios that show the impact on avoided cost by comparing two cases: A base case that is closely approximating the actual conditions with the curtailment and a change case that will simulate needed actions of units to balance the generation and load. The data in Unit Commit reflects operations under ideal conditions that is not always reflective of actual operations. The model cannot be expected to solve reliability criteria on a pure mathematical basis.

Several of Mr. Slater's changes actually took the base cases further away from actual conditions rather than closer to them. I do not agree with these changes as they destroy the whole basis of the analysis.

Mr. Slater actually made base cases that cycled off baseload coal units that were, in fact, on line. Therefore, the base case was very similar to the change case. The purpose of these simulations was to evaluate the curtailment of QF energy as an alternative to cycling off baseload units. Therefore, I believe his changes were totally inappropriate.

Upon review of actual data in response to Mr. Slater's testimony, we found that we also needed to make some minor adjustments in our data to better reflect the actual conditions.

We then reran the simulations with the errors noted

by Mr. Slater corrected, along with these additional refinements made, to bring the base cases closer to the actual conditions. Once again, all seven events showed that the Company would experience negative avoided costs if we had not curtailed the QF energy needed to balance the generation and load.

In response to Mr. Slater's exhibit presented yesterday, KJS-10 and upon review of his change cases, I again see that there are problems with his analysis.

He stated yesterday that the limitation --

MR. McGLOTHLIN: Just a moment. Are you talking about comments on his most recent exhibit?

WITNESS BROUSSEAU: Yes, I am.

MR. McGLOTHLIN: Then I'll object. I think that's beyond the ruling that was made yesterday.

MR. McGEE: Madam Chairman, if I might address that.

I think the ruling that was made yesterday was that Ms. Brousseau would not be allowed to go beyond the information in the runs submitted by Mr. Slater. I don't think it would be fair in the interest of due process to not comment on this.

CHAIRMAN CLARK: Mr. McGee, I had indicated yesterday that Ms. Brousseau would be allowed to go forward with her prefiled rebuttal testimony and that you would be allowed to cross examine Mr. Slater on it, but that she would

not be allowed to respond to Mr. Slater at this point.

And for that reason, do not go beyond what is in your rebuttal testimony.

WITNESS BROUSSEAU: Okay.

Finally, the system operating personnel must be able to take actions before a minimum load condition occurs. Most day-to-day system operating decisions are made with the best information available at the time, along with procedures in place to provide guidelines. It is no different for these curtailment decisions.

The curtailment plan provides appropriate guidelines to use in making decisions on how to balance generation and load. The curtailment plan has been further substantiated by the avoided cost calculations for seven curtailment events that have occurred. In each case no matter which method was used to calculate those costs, the results showed that negative avoided costs would have occurred had the company cycled off a baseload unit instead of curtailing QF energy.

That's all.

MR. McGEE: We tender the witness for cross examination.

CHAIRMAN CLARK: Mr. McGlothlin.

CROSS EXAMINATION

BY MR. McGLOTHLIN:

Q Ms. Brousseau, would you agree that the Company cannot know with certainty prior to our handling of a minimum load event that cycling off a baseload unit would result in negative avoided costs?

A I agree that it is not certain, but we have a high degree of confidence in that.

Q Is it true that prior to each of the seven curtailments to date Florida Power Corporation did not perform any evaluation on the with-or-without scenarios before electing to curtail?

A It is true we did not perform an avoided cost calculation prior to the event.

MR. McGLOTHLIN: No further questions.

CHAIRMAN CLARK: Mr. Watson? Ms. Rule? Mr. Wright?

MR. WRIGHT: Thank you, Madam Chairman. I just have a few questions.

CROSS EXAMINATION

BY MR. WRIGHT:

Q Good morning, Ms. Brousseau.

A Good morning.

Q I have a follow-up question to a question that Mr. McGlothlin just posed to you.

My question -- he asked you whether you performed a

before-the-fact analysis of expected and weighted cost effects of curtailing QFs or cycling off one of Florida Power's units, and you said that you had not done that. My question for you is how accurately can you predict your energy costs with and without curtailment of QFs?

A You're asking how accurately we can predict our energy costs with and without curtailments?

Q Correct.

A Prior to an event?

Q Correct.

A I think we can do as good of a job as our projections may allow us. We would never know the true extent of when our units may be able to come back if we were able to do an analysis without a curtailment and cycle off a baseload unit. I think you could use a unit commit model and put in assumptions and get an expected result.

Q Thank you. You've described what you can do. My question is how accurately; can you get within 10%, can you get within 5% do you know?

A I don't know that. I've never tried.

Q Okay. I want to ask you just to look, if you would, briefly at your exhibit LBD-1. My question, in very simple terms, is will you agree that the cost differences between your base case and your change case are generally small?

A I don't know what "generally small" is. They're

over $1,000 or more, and it is still a negative cost that we would have incurred.

Q What's the general magnitude of the difference between the change in base case as a percentage of the base case. I'll tell you, I've done the math. It's on the order of an average of about 1%? Do you agree with that?

A I'll take your word for it, since I have not performed the calculation.

Q Okay. Do you agree that in four of the cases it was six-tenths of a percent or less? Will you take my word for that?

A Again, if you've done the math, sure.

Q Thank you.

In your summary, I thought you made a statement regarding Mr. Slater's testimony, that in his change cases he cycled off baseload units, and that in that respect his change cases were similar to your change cases. Did I hear right?

A I believe what I said is that in the base cases he took off units that were, in fact on; thereby, making them look like the change cases. Therefore, there was very little difference between the two and no negative cost shown in his analysis.

Q Does Crystal River Unit No. 1 operate on automatic generator control at an output level of 120 megawatts?

A No, it does not.

Q At about what level does Crystal River 1 operate on automatic generator control?

A Around 250, and even then it is very poor.

Q How about the Crystal River 2?

A About the same.

Q Excuse me one moment. Where does Anclote 2 operate? What is the minimum level at which Anclote Unit No. 2 operates on AGC?

A Anclote's normal minimum is 80 megawatts. It's normal AGC minimum is around 200. They have been working to try and reduce that load control range, but it has not been finalized yet.

Q Same question for Bartow Unit 2?

A Bartow Unit 2, it's normal minimum would be around 50 megawatts, and I believe its lower load control range is also around 50. Again, Bartow, we have made emergency minimums where when the unit does have to stay on line, we'll come down to around 20.

Q Okay. At 20 megawatts is it on AGC?

A No, sir.

Q The last thing I want to do, Ms. Brousseau, is I want to pass out an interrogatory response to which -- excuse me a minute. I've got to check who provided this interrogatory response.

MR. WRIGHT: Could I have just one minute, Madam

Chairman?

CHAIRMAN CLARK: Uh-huh.

MR. WRIGHT: Thank you. (Pause)

That's all I have, Madam Chairman. Thank you.

CHAIRMAN CLARK: Thank you, Mr. Wright.

Staff?

MS. BROWN: No questions.

CHAIRMAN CLARK: Commissioners?

COMMISSIONER DEASON: I have a question.

Ms. Brousseau, you were here yesterday and today for Mr. Slater's testimony, correct?

WITNESS BROUSSEAU: Yes, sir.

COMMISSIONER DEASON: And I assumed some questions about an operator that is actually on duty being able to utilize computer simulations and being able to make changes based upon knowledge of the system and expertise and judgment and that sort of thing. And it was his testimony that he felt like those type things could be done on a fairly routine basis, should be done, and that it would not be such that time constraints would prevent a quality analysis being done before curtailments are ordered. What is your position on that?

WITNESS BROUSSEAU: I don't think that I agree with that characterization. The events leading up to a curtailment event, oftentimes we've a good projection that it may occur in the morning or by the noon hour when we issue our Level 1

alert. However, with the way the load forecast is coming on, what units are doing what, the QF generating units on, we always are not totally sure of what the conditions are going to be.

We have a lot of experience in what is going to occur with our Crystal River baseload coal units, and I think that we generally know that if we were to cycle them off we would incur this cost, and there's a very good chance that they may not occur to come back on line in time.

Part of this is not just planning for the curtailment event itself, but we're looking ahead at the following day and how to meet that peak. So you're not just going to do an analysis for those minimum load hours. And, in fact, we've done that in our planning process. We're always looking out four, five days ahead.

So I believe that to try to perform this rigorous avoided cost calculation prior to would be very time-consuming and require someone to sit there and do a lot of "what ifs" to determine your best shot at what might happen.

The system operators on duty at the time the event is approaching do not have the benefit of the time or the expertise to do that. It would require bringing engineers in there or engineering assistants to perform that analysis. So it really is not a practical matter to be able to try and do a lot of "what if" simulations prior to an event.

COMMISSIONER DEASON: Is it more a matter of it's not practical to do so being that there would have to be engineers on duty and that sort of thing from a cost standpoint, or is it a matter that it's not possible to do so.

WITNESS BROUSSEAU: I think that it's probably a little of both. It's not practical, as I mentioned, but also as far as being possible, you would have to develop a variety of these "what if" cases.

Mr. Slater chose to cycle off Crystal River 4 units in some of his as a matter to just come up with the economic solution. We had put constraints in things to try and model reliability type of criteria. So even in developing your "what if" scenarios, there's going to be constraints that you have, is knowing what unit you would need to have on line for the following day. So even if you try to do some "what if" situations, is it possible to develop a variety of scenarios that may occur, but the guarantee that any one of those would happen, it's hard to tell exactly in your analysis which one you would choose to go by. That's where the planning process we do as an ongoing basis really helps us to get to the right decision.

COMMISSIONER DEASON: Well, is there any room for that type of analysis or judgment, even though it may not be as rigorous as Mr. Slater's analysis, as opposed to simply making an assumption that cycling off a baseload unit is

always going to result in negative avoided cost?

WITNESS BROUSSEAU: You're asking if there's any room for that? I guess I'm not sure --

COMMISSIONER DEASON: Well, as I understand it, you have -- and you think it is a conservative assumption to make, and that may be correct, I'm not sure, but I believe it's your assumption that negative avoided costs are going to result if a baseload unit is cycled off as opposed to curtailing a QF in a minimum load situation; is that correct?

WITNESS BROUSSEAU: I think that's the basis for our plan.

COMMISSIONER DEASON: Okay. And my question is is that what should be done on a going-forward basis, or is there any room for some type of analysis or judgment, or some type of a computer run to look at avoided cost before a decision is actually made to curtail a QF?

WITNESS BROUSSEAU: I think that an analysis could be performed. Again, I think it would be perhaps fraught with some inaccuracies, because you don't always know what the outcome is going to be.

There have been many situations where we thought an event was going to occur, and we've squeaked by because we were able to make a sale. And oftentimes you may make the decision to do something based on your projection ahead, and then at the last moment, when a sale can come through or

something happens we can take our unit a little bit lower, we may have done something because of that analysis we didn't real, in fact, need to do; and, therefore, our ratepayers may not have benefited from us being able to wait and make that decision at the last moment.

I think -- you know, to answer your question, certainly we could do an analysis but, I'm not sure that it would be the most appropriate thing to help us make the best decisions.

CHAIRMAN CLARK: Any other questions?

Redirect?

MR. McGEE: Just a couple Madam Chairman.

REDIRECT EXAMINATION

BY MR. McGEE:

Q In follow-up to Commissioner Deason's question, do you know approximately how many times you've issued a Level 1 minimum load alert since the plan has been in effect?

A I think it's somewhere on the order of around 30 to 40 times that we've actually issued a Level 1 alert.

Q Yet you've only actually went to the Level 4 for the seven curtailments that we've actually had?

A That's correct.

Q You indicated in response to an earlier question that you didn't perform an analysis of negative avoided cost prior to curtailment. Did you anticipate that negative

avoided cost would be incurred absent curtailing the QFs?

A Could you repeat that, please?

Q Even though you didn't perform an analysis, did you have an anticipation that negative avoided cost, absent curtailment, would occur on the basis of system costs that you were aware of?

A Yes, I believe so.

Q And you also indicated in response to another question that your curtailments were pursuant to the plan. Was that plan developed to deal with the negative avoided cost problem?

A I think the plan was developed with that in mind that whenever a baseload coal unit would be cycled off we would incur expenses that we normally wouldn't have otherwise. And I do believe that the plan was built around that basis. And also the fact that it was -- that baseload coal units are the backbone of the system, so I think both.

Q In addition to the negative avoided cost unit commit simulations that you perform after the fact, do you have any other basis to support your assumption that negative avoided cost will, in fact, be incurred by cycling off coal units to avoid curtailment?

A I think that the manual calculations that were performed as part of Mr. Southwick's testimony would be another fact or another example of the avoided cost

calculations that were done.

MR. McGEE: Thank you. Those are all of the questions I have.

CHAIRMAN CLARK: Thank you, Mr. McGee.

MR. McGEE: We'd ask that Composite Exhibit 16 -- you may have to refresh my memory. Was that 16?

CHAIRMAN CLARK: 16.

MR. McGEE: -- be admitted into evidence.

CHAIRMAN CLARK: It will be admitted in the record without objection.

(Exhibit No. 16 received in evidence.)

CHAIRMAN CLARK: Thank you, Ms. Brousseau.

WITNESS BROUSSEAU: Thank you.

(Witness Brousseau excused.)

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CHAIRMAN CLARK: Mr. Southwick.

MR. McGEE: Madam Chairman, you'd indicated earlier that at the time Mr. Southwick comes up with his rebuttal we would deal with the question of the areas of his testimony that need to be withdrawn pursuant to the stipulation that Mr. Presnell referred to earlier.

CHAIRMAN CLARK: Yes.

MR. McGEE: As he mentioned, those are on Exhibit A to the letter by Mr. Fama to Mr. Presnell. I believe a copy of that was provided to the court reporter, and I'm wondering

if that's sufficient?

CHAIRMAN CLARK: I'm not sure where you are. Exhibit what?

MR. McGEE: The letter dated May 8th to Mr. Presnell.

CHAIRMAN CLARK: Which is Exhibit 15:

MR. McGEE: Yes.

CHAIRMAN CLARK: Okay.

MR. McGEE: Will that be sufficient since that was provided to the court reporter to resolve the areas that need to be withdrawn?

CHAIRMAN CLARK: Yes.

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HENRY I. SOUTHWICK, III.

was called as a rebuttal witness on behalf of Florida Power Corporation and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. McGEE:

Q Mr. Southwick, do you have before you a document entitled, "Rebuttal Testimony of Henry I. Southwick, III"?

A Yes.

Q Is that your rebuttal testimony for this proceeding today?

A Yes, it is.

Q Do you have any additions or corrections that you

need to make to your prepared rebuttal testimony?

A No.

Q If I were to ask you today the questions that are contained in that testimony would your answers be the same?

A Yes.

MR. McGEE: Madam Chairman, we'd ask that Mr. Southwick's rebuttal testimony be inserted into the record as though read.

CHAIRMAN CLARK: Mr. Southwick's rebuttal testimony will be inserted in the record as though read, with the exception of those listed as withdrawn on Exhibit A of Exhibit 15.

MR. McGEE: Thank you.

CHAIRMAN CLARK: Thank you.

Q (By Mr. McGee) Mr. Southwick, you also have attached to that prepared testimony Exhibits HIS-6 through HIS-10. Were those exhibits prepared by you or under your supervision and control?

A Yes.

Q Do you have any corrections that need to be made to the exhibits?

A No.

MR. McGEE: Madam Chairman, we'd ask Exhibits HIS-5 through 10 be marked for identification as Composite Exhibit -- are we at 17 now?

CHAIRMAN CLARK: Yes. Did you say 5 through 10?

MR. McGEE: Yes, ma'am.

CHAIRMAN CLARK: Okay. They will be marked as Exhibit 17.

(Exhibit Nos. 17 marked for identification.)

FLORIDA POWER CORPORATION
DOCKET NO. 941101-EQ

# REBUTTAL TESTIMONY OF HENRY I. SOUTHWICK, III

## I. INTRODUCTION AND PURPOSE

**Q. Please state your name and business address.**

A. My name is Henry I. Southwick, III. My business address is Post Office Box 14042, St. Petersburg, Florida 33733.

**Q. Have you previously testified in this proceeding?**

A. Yes. I filed direct testimony on behalf of Florida Power Corporation ("Florida Power" or "the Company") on February 20, 1995.

**Q. Are you sponsoring any new exhibits together with this rebuttal testimony?**

A. Yes. I am sponsoring Exhibits 17 (HIS-5) through 17 (HIS-10).

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

A. I will respond to portions of the direct testimony of Messrs. Roy Shanker and Kenneth Slater on behalf of Orlando Cogen Limited, L.P. and Pasco Cogen, Ltd. (jointly "OCL/Pasco"). That testimony questions whether Florida Power is correctly implementing the Commission's rules for curtailing QF purchases under minimum load conditions. Messrs.

Robert Dolan and Steven Lefton also focus on specific segments of that testimony. I will also answer Mr. Roger Yott's contentions made on behalf of OCL that Florida Power is unfairly treating those of its QF suppliers who have not entered into written voluntary output reduction arrangements.

On April 25, 1995, Florida Power received copies of proposed supplemental testimony prepared by Mr. Slater. The Company will address that testimony in separate rebuttal to be filed before the hearing in this docket.

**Q. How is Florida Power's rebuttal testimony organized and how does your testimony fit within that organization?**

A. Florida Power's objective is to highlight the key errors in OCL/Pasco's position. Toward that end, the Company is submitting rebuttal testimony on these primary topics:

- OCL/Pasco's self-serving and unsupported analytic framework;
- OCL/Pasco's mischaracterization of the minimum load problem as a mere economic issue of Florida Power's own making and not an "operational problem" justifying curtailments;
- OCL/Pasco's incorrect assertions that Florida Power can and must do more to avoid involuntary QF curtailments than the substantial mitigation measures already undertaken both within and outside of the Curtailment Plan;
- OCL/Pasco's false conclusion that the minimum load problem which the Curtailment Plan seeks to remedy will not result in "negative avoided cost" absent curtailments; and
- OCL's unsupported effort to achieve what would amount to preferential inclusion in the Group A curtailment category.

Mr. Dolan's rebuttal focuses on the first two of these topics and I will discuss the last three. Mr. Lefton's rebuttal relates to the fourth item, specifically the propriety of including "unit impact" costs in a properly constructed analysis of negative avoided costs.

Our supplemental rebuttal will deal with Mr. Slater's criticisms of the Company's negative avoided cost analyses, including his last-minute manipulations of Unit Commitment data in his April 25, 1995 supplemental testimony.

I would like to emphasize that I disagree with countless statements and inferences in the OCL/Pasco testimony, but I am confining my discussion to the three major issues covered by my rebuttal. My failure to mention a particular comment by the OCL/Pasco witnesses (particularly those in Mr. Slater's supplemental testimony) should not be taken as acquiescence.

**Q. Before turning to your specific subject areas, would you please describe your general impressions of the intervenor testimony?**

A. Certainly. The fact that only two of the 22 QF suppliers affected by the Curtailment Plan have chosen to file testimony disputing the Plan should itself speak volumes. A number of QFs have supported the Plan's curtailment priorities as being reasonable, and generally, all QFs have been responsive to the Plan when it has been necessary to call for

curtailments. I am convinced that the Plan is grounded on solid principles and is structured in a fair, reasonable, and equitable manner.

Much of the OCL/Pasco testimony amounts to little more than camouflage designed to create the impression that QF purchases are absolutely unassailable, and to deflect the Commission's attention from the undeniable fact that Florida Power has made tremendous efforts to effectively address the minimum load problem, mitigate the need for curtailments, and achieve a fair apportionment of burdens in the relatively few cases where involuntary curtailments actually become necessary.

It is probably more significant to note what OCL/Pasco do *not* dispute than what they do dispute. For example, there is no substantiated claim in the OCL/Pasco testimony that the Company's exercise of curtailment rights has been anything other than very narrowly applied. In 1994, Florida Power purchased 4,630,882 MWh of QF energy. That figure is expected to rise considerably in 1995 because of new QF projects coming on-line. In sharp contrast, we have asked for involuntary curtailments from QFs in only 31 hours, amounting to only 4,327 MWh or less than one-tenth of one percent. ~~Likewise, OCL/Pasco do not cite or document any specific injury from the Curtailment Plan. If damages of any significance had been incurred, the Commission certainly would have expected to hear about it~~. Also absent from OCL/Pasco's case is any claim that the Plan fails to provide adequate notice of curtailments

as required by Rule 25-17.086. This is gratifying because one of the Company's major goals was to deal effectively with the notice issue.

Additionally, in three pieces of prefiled testimony, no OCL/Pasco witness even mentions Section 6.3 of their contracts with Florida Power. Thus, no witness denies that this section specifically contemplated the possibility of curtailments in minimum load conditions. Furthermore, OCL/Pasco have not offered an effective challenge to the principle that the Company would incur *some* measure of negative avoided costs if forced to cycle off a Crystal River coal unit instead of a justifiable curtailment. Their challenges at most go to the question of quantifying a negative avoided cost, a task which Florida Power agrees is difficult to accomplish with precision.

When reduced to its essential points, the OCL/Pasco testimony leaves the Commission with a fairly narrow set of issues on which to focus.

**Q. Please provide a brief summary of your rebuttal.**

A. I begin my analysis from Mr. Dolan's conclusion that Mr. Shanker has created an artificially restrictive framework for evaluating the curtailment issue. As Mr. Dolan explains, Mr. Shanker is reading into the PURPA rules a whole host of substantive tests which in reality simply don't appear in the language of any rule upon which he relies. By doing this, he tries to assume away the minimum load problem, characterizing it as one that should have been planned for and now can be avoided entirely

by taking actions that would impose additional costs and reliability risks on the Company's ratepayers in order to continue payments to the QFs. For the reasons given by Mr. Dolan, the Commission should not adopt Mr. Shanker's self-serving and unsupported analytic framework. However, the evidence establishes that Florida Power's Curtailment Plan would pass muster even under that framework.

Mr. Dolan also explains why OCL/Pasco are in error when they characterize the minimum load problem as a condition of Florida Power's own making. He establishes that Florida Power has prudently planned its system generation supplies and that those planning decisions have been subjected to ongoing scrutiny by this Commission. Nevertheless, given current minimum load levels, the Company is experiencing a periodic problem matching generation and load during minimum load conditions. This is both a reliability concern and an economic concern as I showed in my direct testimony and as I will elaborate upon in this rebuttal. It is wrong to write the problem off as one that Florida Power should have contracted around by negotiating dispatch rights from QFs. In fact, as Mr. Dolan demonstrates, all of the contracts include the curtailment rights which Florida Power needs to implement the Curtailment Plan; OCL/Pasco's contracts, in particular, refer to those rights unambiguously in Section 6.3. I will show that OCL/Pasco's current arguments simply attempt to avoid justifiable curtailments and to shift the burden of matching generation and load directly onto Florida Power ratepayers.

I will also address the issue of mitigation. The record should leave no doubt that Florida Power has done everything within reason to mitigate curtailments in ways that will not threaten reliability or unreasonably increase ratepayer costs. The additional measures proposed by OCL/Pasco represent unreasonable ways to assume away an excess generation condition. Moreover, as I will explain, if OCL/Pasco's arguments for disposing of excess generation are to be given any credit, then they must also lead to the conclusion that some of the as-available payments being made to the QFs are far greater than warranted on a full avoided cost basis. OCL/Pasco cannot seriously argue that Florida Power has excess energy to sell off-system at a cost of zero, but that an equivalent amount of energy simultaneously being purchased from QFs is avoiding the need for generation at a cost greater than zero.

I will also show that OCL/Pasco's attempts to refute the Company's negative avoided cost conclusions are unfounded. The simple fact is that cycling off a Crystal River coal unit to continue purchasing an equivalent amount of energy from QFs would put the Company in exactly the negative avoided cost situation which the FERC and this Commission have cited as justification for curtailment. Contrary to OCL/Pasco's contentions, Florida Power has examined avoided costs over an appropriate time frame and has amply established that it would incur negative avoided costs in the circumstances where the Curtailment Plan would call for curtailments.

Finally, I will show why Mr. Yott's equity arguments are wrong. It is certainly significant that no other QFs in the Group B or C curtailment categories have raised an equity claim and I do not believe that such a claim is sustainable based on the facts before the Commission. It is also important to remember that OCL has repeatedly been offered the opportunity, but has declined, to join Group A on terms similar to those applicable to all other QFs in Group A. Florida Power has given sound reasons for its curtailment groupings. OCL alone (note that Pasco did not join in sponsoring Mr. Yott's testimony) would like to be treated as if it had contributed assured output reductions to help solve the minimum load problem, when in fact it has not. Florida Power believes that including OCL in Group A would treat OCL preferentially.

**Q. You have said that you see the real issues in this case as being fairly narrow. Please explain where the basic differences lie between the OCL/Pasco position and the Company's position.**

A. OCL/Pasco dispute certain of Florida Power's quantification methods, but have not effectively challenged the Company's conclusion that when forced to begin cycling off baseload units, the Company will incur *some* measure of increased operating costs (*i.e.*, negative avoided costs) as contemplated by the FERC/FPSC rules. Mr. Shanker in fact conceded as much at page 23 of his testimony where he said that Section 292.304(f) was intended to respond to situations where, "a utility would, absent curtailments, have to turn off its own base load generation due to QF purchases, resulting in net increased operating

Finally, I will show why Mr. Yott's equity arguments are wrong. ~~It is certainly significant that no other QFs in the Group B or C curtailment categories have raised an equity claim and I do not believe that such a claim is sustainable based on the facts before the Commission. It is also important to remember that OCL has repeatedly been offered the opportunity, but has declined, to join Group A on terms similar to those applicable to all other QFs in Group A. Florida Power has given sound reasons for its curtailment groupings. OCL alone (note that Pasco did not join in sponsoring Mr. Yott's testimony) would like to be treated as if it had contributed assured output reductions to help solve the minimum load problem, when in fact it has not. Florida Power believes that including OCL in Group A would treat OCL preferentially.~~

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A. OCL/Pasco dispute certain of Florida Power's quantification methods, but have not effectively challenged the Company's conclusion that when forced to begin cycling off baseload units, the Company will incur *some* measure of increased operating costs (*i.e.*, negative avoided costs) as contemplated by the FERC/FPSC rules. Mr. Shanker in fact conceded as much at page 23 of his testimony where he said that Section 292.304(f) was intended to respond to situations where, "a utility would, absent curtailments, have to turn off its own base load generation due to QF purchases, resulting in net increased operating

costs (*i.e.*, "negative avoided costs")." The big bone of contention is *when* this unit cycling/negative avoided cost scenario arises.

Florida Power concludes that the negative avoided cost scenario arises when the Company has:

(1) taken all reasonable steps, consistent with outstanding contracts/rate schedules, to minimize power purchases from other utility sources;

(2) reduced self-generation to minimum operating levels consistent with prudent utility practice and sound economic dispatch; and

(3) maximized interchange sales to an extent which is compatible with regulatory criteria and ratepayer interests.

In contrast, OCL/Pasco assert that the negative avoided cost scenario could only arise after the Company has:

(1) breached its purchase contracts with other utilities;

(2) operated Company units so as to jeopardize reliable, cost-effective service to customers during normal operating conditions solely to guarantee that QFs will not contribute to an over-generation condition during the relatively few hours of minimum load; and

(3) given away large amounts of energy below the cost which the Company's customers are paying to generate or purchase energy -- simply to continue buying an equivalent amount of

QF energy at an as-available price which, by OCL/Pasco's own reasoning, could only be said to be excessive.

Florida Power's approach preserves PURPA's objective (discussed by Mr. Dolan) of cost neutrality for native load customers. OCL's approach, in contrast, treats the QF purchases as sacrosanct and represents a direct attack on the ratepayer neutrality principle.

## II. REBUTTAL TO OCL/PASCO'S TESTIMONY

### A. Florida Power Should Not Be Required To Engage in Mitigation Measures Beyond Those Already Taken And Contemplated By the Curtailment Plan

**Q. Mr. Shanker claims that all the Company has done to mitigate curtailments (and all that the Curtailment Plan requires) is to (1) pursue additional Florida Energy Broker sales and (2) reduce (but not eliminate) the Company's purchases from the Southern Companies. (Shanker, pages 33-34). Do you agree with Mr. Shanker's assessment of the facts?**

A. No. I have shown that the current minimum load problem is being substantially minimized by use of all reasonable and appropriate measures. Taking further steps to avoid QF curtailments would result in both a threat to system reliability and a direct adverse effect on Company ratepayers.

Mr. Shanker overlooks a large number of measures which the Company has pursued. For example, he fails to mention the Company's recent power sales to Oglethorpe Power Cooperative and the Southeastern Power Administration; additional efforts to market power both on and off the Energy Broker before and during minimum load periods (including direct contacts with all other area utilities likely to have a possible purchase need); significant reductions in the Company's own generating resources (including shutting down the University of Florida unit, shutting down the peaking and intermediate units, and bringing the Crystal River coal units to unprecedented low operating minimums); negotiation of additional voluntary QF output arrangements; and negotiation of a new minimum load energy sell-back arrangement with the Southern Companies.

I have discussed some of these efforts in my direct testimony and I will elaborate on some in this rebuttal. Mr. Shanker is ignoring the fact that Florida Power has gone to extraordinary lengths to control the minimum load problem and to reduce the need for curtailments.

**Q. OCL/Pasco's testimony argues that additional mitigation measures should be followed before initiating involuntary QF curtailments. What is your general response to those claims?**

A. I repeat that Florida Power has gone the extra mile to ensure that curtailments will be kept to a minimum, consistent with existing contracts, reliability considerations, economic system operation and

ratepayer interests. Messrs. Shanker and Slater discuss several ways in which they believe that the Company can and must do more to mitigate the minimum load problem. These are: (1) establishing a policy of interrupting Southern Company purchases before QFs; (2) reconfiguring the commitment of Company generating units; (3) marketing off-system energy at any market clearing price; and (4) cutting retail prices. The first two measures are aimed at further reducing generation, while the second two are designed to elevate demand.

In effect, OCL/Pasco are saying that the minimum load problem is not real. They claim there is no mismatch between generation and load because generation can always be further reduced to eliminate the problem and load can always be bumped up with the same effect. There is, according to Messrs. Shanker and Slater, no operational problem at all because there are solutions which the Company is simply unwilling to accept because of economic impacts on itself or its ratepayers. Presumably, in the theoretical world created by these witnesses, the minimum load unit cycling conditions described both by the FERC and this Commission as justifying curtailments would *never* arise because a utility like Florida Power could always cause an excess generation condition to evaporate by (1) walking away from its firm utility purchase commitments; (2) redispatching the system to cycle off baseload units on a long-term basis in order to avoid doing so in the short-term; (3) giving away wholesale interchange power and, by the

same logic, presumably even paying a third party to accept it; and (4) similarly, giving away service at retail.

I will discuss each of these measures in turn and it should become readily apparent that they represent unrealistic, unreliable and/or uneconomic ways in which to address the minimum load problem.

1. Interrupting Purchases From The Southern Companies

**Q. Do you agree with OCL/Pasco's assertion that Florida Power is subordinating firm QF purchase contracts to firm utility purchase contracts?**

A. Absolutely not. Before initiating any involuntary QF curtailments, the Company has committed to curtailing all of its firm power purchases from other utilities to the maximum extent allowed by the applicable contracts. In the case of Tampa Electric, Florida Power can and will reduce its purchases to zero prior to any involuntary QF curtailments. In the case of the Southern Companies, the purchases will be reduced as much as possible without running afoul of the existing contractual arrangements. As a result, the QF purchases actually are given a better interruption priority than the utility purchases -- not an inferior priority as OCL/Pasco suggest. Mr. Shanker says that "FPC should curtail its other firm utility purchases prior to attempting to curtail purchases from the Cogens." (Shanker, page 34). Florida Power has committed to

doing exactly what Mr. Shanker suggests subject to its contractual commitments to the Southern Companies.

**Q. Is Florida Power somehow placing more importance on its compliance with utility contracts than on its compliance with QF contracts?**

A. No. Florida Power is living by the terms of all of its contracts. It is important to recognize, however, that the contracts are not all the same. The Southern Companies contract, entered into in 1988, contained certain absolute minimum purchase obligations depending on circumstances on the Southern Companies' system. As part of a contract and a FERC-jurisdictional rate schedule, those minimum purchase requirements are enforceable against Florida Power. In contrast, as explained by Mr. Dolan, the Company's QF contracts, many of which like OCL/Pasco's were entered into after the contract with the Southern Companies, anticipated and expressly sanctioned purchase interruptions when made in accordance with Rule 25-17.086. This is a material distinction in contract terms which cannot be ignored. Under the Curtailment Plan, Florida Power is simply applying the various contracts as written.

**Q. How do you respond to the assertion that Florida Power could do more to reduce its utility power purchases?**

A. There is no truth to that assertion. As I explained in my direct testimony (at pages 17-18), before each of the first seven curtailment events, Florida Power's system operating personnel in fact avoided all

purchases from Tampa Electric and reduced the purchases from the Southern Companies as much as the contract would allow. During some of the curtailment events, the Southern purchases were avoided entirely and during every event those purchases were reduced to well below the 168 MW contract minimum.

Thus, Florida Power already has been substantially reducing the Southern Companies purchases from the base 400 MW purchase amount. Moreover, Florida Power has continued its efforts to even further avoid purchases from the Southern Companies during minimum load conditions. At the end of February 1995, we reached an understanding with the Southern Companies that should greatly assist in mitigating the minimum load problem in the future.

**Q. Please describe that understanding with the Southern Companies.**

A. The arrangement with the Southern Companies is summarized in my February 27, 1995 letter to Mr. James Tulloss of Southern Company Services, Inc. (*See* Exhibit 7 (HIS-5)). Basically, the agreement permits Florida Power to reduce system generation by selling back the required purchases to the Southern Companies during minimum load periods whenever Florida Power's energy cost is at or below the Southern Companies' energy cost. These sales initially will occur under Service Schedule C of the parties' interchange contract.

**Q. Do you expect this new arrangement to have a significant impact on QF curtailments?**

A. Yes. We already have taken advantage of this new arrangement and have thereby avoided one involuntary QF curtailment event.

**Q. Mr. Shanker sees no problem in a hypothetical situation in which Florida Power would be required to pay for power from the Southern Companies, but would not receive that power. (Shanker, pages 36-37). Do you agree?**

A. I disagree for two reasons. First, if his scenario were to arise, the net effect would be an unwarranted cost burden on Florida Power's ratepayers incurred solely to preserve a cost subsidy to the QFs. The Commission should not require Florida Power to mitigate one adverse cost impact on ratepayers (the unit cycling scenario) by first incurring another type of adverse cost impact for the ratepayers. Florida Power does not believe that the PURPA rules or the QF contracts should be read to require this unreasonable result.

Second, Mr. Shanker overlooks a very significant point, which is that the Southern Companies purchase requires minimum takes, not just minimum payments. When the Southern Companies also are experiencing light loads, they too have no need for the excess energy and it may not be possible for Florida Power to refuse deliveries.

## 2. Reconfiguring Commitment Of Florida Power Units

**Q. Mr. Shanker asserts that Florida Power has not planned ahead for a minimum load problem which it has anticipated for two years or more. (Shanker, page 38). Is he right?**

A. No. The Company has been actively pursuing ways to minimize the minimum load problem for at least two years. As early as the beginning of 1993, we began investigating options to reduce our own unit output during minimum load periods. As a result, we expended substantial time and resources making modifications to the Crystal River coal units as well as other Company generating units to improve their low-load operation, by expanding their load control ranges, increasing their ramp rates, and reducing their minimum generation capability far below the historic levels. We also attempted to renegotiate or work to mitigate the minimum purchase requirements in the Company's contract with the Southern Companies. As I discussed earlier, we recently were successful in that effort. In addition, the Company investigated potential ways to increase retail customer loads, but as I discuss later, it was concluded that this would not be feasible. In mid-to-late 1993, we also began factoring the minimum load issue into the maintenance schedule planning for our units and for the QF units. These examples illustrate that the Company has responsibly approached the minimum load problem in a variety of ways and has worked hard over the past couple of years to minimize any impact on QFs in advance of the problem.

**Q. Has Florida Power also taken more recent actions to minimize the minimum load problem?**

A. Yes. We are reducing minimum load problems on an ongoing basis through off-system sales (including the recent sales discussed in Mr. Harper's direct testimony to the Rocky Mountain Hydro project and the Carter's Dam project); our new power sell-back arrangement with the Southern Companies; scheduling of maintenance for our own units and for the QF units; and making optimal use of the voluntary QF output reductions including an additional arrangement under which Tiger Bay agreed to come off-line each night near the end of 1994 upon request (thereby avoiding six curtailments in December 1994 that otherwise would have been required). We are devoting more time and personnel resources than ever before to the planning and operations processes in order to minimize QF curtailments. In addition, we have obtained access to longer-term weather forecasting services to better anticipate our loads and resource needs.

We have made many operating decisions in recent months to help avert QF curtailments, such as keeping Company units off-line even though they were scheduled to return to service after a maintenance outage, advancing the dates for scheduled maintenance, and slowing the rate at which the Crystal River nuclear unit was returned to service after an outage.

**Q. Is Mr. Shanker correct when he says that the Company has not modified its unit commitment planning process to recognize the implications of minimum load conditions?**

A. He is wrong on that point as well. In earlier years, Florida Power typically performed its Unit Commitment analyses for periods as short as two days. We now do these analyses for a minimum of four days and for as long as ten days. The decision to extend this period was based, in large part, on the need to anticipate and deal effectively with minimum load conditions.

**Q. Do you agree with OCL/Pasco that Florida Power could do more to mitigate the minimum load problem by changing the manner in which its units are committed?**

A. No. As I explained earlier, Florida Power has taken all reasonable steps both to minimize power purchased from other utility sources and to reduce self generation to minimum operating levels consistent with prudent utility management and sound economic dispatch. OCL/Pasco's contentions that Florida Power could do more in this regard by changing the type or number of units committed during a period of up to a week is wrong for two main reasons. First, Florida Power does not know that far ahead of time if a minimum load condition actually will occur, much less the precise time and magnitude of such an event. Second, even if Florida Power had such knowledge, sound economic dispatch considerations would prevent the type of long-term unit commitment

actions suggested by OCL/Pasco to fix a short-term minimum load problem.

**Q. Could you explain why Florida Power cannot precisely predict the magnitude or occurrence of a minimum load condition and how this impacts the actions proposed by OCL/Pasco?**

A. Yes. While Florida Power can make general predictions of potential minimum load problems based on weather forecasts and other system factors, and even though we are now looking at these potential situations more carefully than ever, the actual occurrence of a minimum load problem depends upon a variety of factors causing the loads and resources (including QF generation) to change. There were a large number of potential minimum load (and curtailment) situations during the October 1994 through April 1995 period, yet there were only seven curtailment events. If Florida Power had implemented some action, such as a curtailment, during all periods that had the potential for a minimum load problem, there would have been many needless curtailments.

Even though we carefully compile and review all available information, we often have no more than a few hour's notice that a minimum load problem might occur. This short-term warning seems to preclude the week-ahead system planning fixes that are suggested by OCL/Pasco.

**Q. Explain why economic dispatch considerations would preclude Florida Power from taking the actions suggested by OCL/Pasco even if it had perfect foreknowledge of minimum load conditions.**

A. Mr. Slater says at page 9 of his testimony that Florida Power could shut down a baseload unit over an extended period of time and still have no trouble meeting peak loads with uncommitted cycling capacity, peakers or power purchases. While such capacity may be available operationally, it would only be available *at much higher cost*. Mr. Slater is asking us to ignore sound economic dispatch decisions without any recognition of the adverse ratepayer consequences.

Florida Power follows a customary industry practice of committing units and dispatching them to minimize the cost to ratepayers. Therefore, even if we knew a week ahead of time that a minimum load condition would occur, the most economical solution would probably not be to cycle off a coal-fired baseload plant for the entire week, since higher-cost units would have to be run during the peak periods to make up the energy from the shut-down coal unit, thus raising the overall cost to ratepayers.

Again, OCL/Pasco seem to be using the circular argument that if one starts with the premise that QF purchases can never be curtailed, then Florida Power could take actions that might prevent the need for those QFs to be curtailed. We do not accept that premise. OCL/Pasco's suggestion that Florida Power change its unit commitment practices to

prevent all potential minimum load curtailments amounts to nothing more than a suggestion that Florida Power's ratepayers should accept higher costs instead of Florida Power exercising the legitimate curtailment rights in the QF contracts.

**Q. Are there other problems with this suggestion by OCL/Pasco?**

A. Yes. As I said earlier, there are many periods that have the potential to become minimum load problems. A Level 1 Minimum Load Alert under the Curtailment Plan has been issued 47 times since October 1994, and that number understates the total number of times where a minimum load problem was possible but was avoided without having to issue an alert. If Florida Power were to follow OCL/Pasco's suggestion, this would mean changing unit commitment, and raising costs, for each period in which a minimum load problem is expected -- many more than the number of actual curtailment events. Since many of these predicted minimum load problems will not occur, costs would be raised considerably for ratepayers.

### 3. Off-System Sales At Discounted Prices

**Q. Do you agree with OCL/Pasco that Florida Power could do more to mitigate the minimum load problem by marketing power at wholesale?**

A. No. We are following a practice of marketing as much power as we can both before and during curtailment events consistent with established interchange practices in the state of Florida. OCL/Pasco's contentions

that the Company should sell more power by dropping its prices is an excellent example of my earlier statement that OCL/Pasco would prefer to assume that there never will be any excess generation. This can be seen clearly in Mr. Slater's comment that "FPC's plan fails to require that FPC attempt to market excess generation at a price designed to ensure a sale . . . ." (Slater, page 5). If the sale of all excess energy must be "ensured," then it is hard to imagine a situation when there ever would be any excess generation.

**Q. Is it a given, as Mr. Shanker assumes (Shanker, page 40), that "FPC can increase sales by lowering its offering price on or off the Energy Broker"?**

A. No, this is not necessarily so during minimum load periods. As I have testified previously, minimum load conditions are a function of weather conditions. In Florida, these minimum load conditions generally occur during nighttime hours when, because of mild weather conditions, there is neither a major heating nor cooling demand. Generally, the prevailing weather conditions are comparable throughout the region, meaning that all area utilities are dealing with relatively low loads at the same time. It is very likely that, when Florida Power is experiencing its minimum loads, there will be few or no takers for its excess generation.

There is also another important point concerning the use of the Florida Energy Broker as a vehicle for mitigating QF curtailments. By definition, Broker sales are hourly transactions. There is no assurance that any

Broker transaction will continue from one hour to the next, particularly when everyone in the state is experiencing low demands. On the other hand, the Company has to manage its minimum load conditions across a period which typically spans about three to six hours. When entering a minimum load period, the system operating personnel need to have a workable strategy for balancing the generation and load throughout that period. Using the Broker for this purpose is not feasible because an energy sale may be "here one hour and gone the next." The result of this haphazard scheduling would mean that curtailment instructions also would have to be given on an hour-to-hour basis creating a potential yo-yo effect on the QFs and a scheduling nightmare for the system dispatcher.

**Q. Can you explain why it is important for a utility that is selling power off-system to recover at least the full cost of producing (or purchasing) that power?**

A. The answer relates to the question of whether the utility's production costs (including purchased power costs) are being properly allocated among the utility's different customer classes. Generally, power plant capacity is constructed or purchased to serve the peak needs of a utility's native load customers. As a consequence, rates for the utility's native load customers are designed so that these customers bear the entire cost of the utility's generation, including capacity costs and energy costs such as fuel and variable O&M expenses. However, from time to time the utility is able to market temporarily unneeded capacity

or energy. These off-system sales can benefit the native load customers who have supported the utility's system and who are paying for fuel used to produce energy, because the revenues received from off-system sales are returned to the native load customers in the form of a cost-of-service credit. When a sale is priced at or above the seller's highest production (or purchased power) cost at the time of the sale, the revenue credits will provide a native load benefit. On the other hand, a sale priced below the cost of producing (or purchasing) the energy would fail to return a sufficient credit to the native load customers. In that case, the native load customers would be paying to generate (or purchase) the energy sold to another utility while recovering only a portion of that cost -- in other words, the native load customers would be subsidizing the sale.

**Q. Are OCL/Pasco arguing that Florida Power should be forced to sell power on the interchange market at prices below its incremental cost of production?**

A. No. Mr. Shanker concedes that he is not proposing that the Company should sell economy energy below its incremental cost. (Shanker, page 41). Mr. Slater's analysis accepts Mr. Shanker's premise. (Slater, page 9).

**Q. If OCL/Pasco accept the concept of an incremental cost pricing floor for off-system sales, then why is there a dispute on this subject?**

A. Messrs. Shanker and Slater make the same contention from different perspectives. Their point is that Florida Power is not calculating its costs correctly during minimum load periods and that, during such periods, Florida Power should be happy to sell energy at any price at or above zero.

Q. Do you agree?

A. No. Their position is inconsistent with longstanding practice throughout Florida and it would unreasonably shift the costs of continuing QF purchases onto the backs of Florida Power's native load customers. Their position assumes that QF purchases are always "must-take" rather than acknowledging that QF purchases both by law and contract can be curtailed where continuing the purchases would be more costly to ratepayers. Moreover, their approach could not prevail without also concluding that the as-available price determined for a portion of the QF purchases during minimum load conditions is also overstated.

Q. Please explain in general terms the arrangements which Florida Power has in place to market power off-system.

A. The Company sells power off-system under a variety of bilateral agreements which are structured to provide mutual benefits from purchase and sale transactions. Some arrangements are fairly long-term, such as our summer peaking capacity sales to Georgia Power Company and Oglethorpe Power Cooperative.

Many of our off-system sales are shorter-term and are made under the interchange contracts which Florida Power has entered into with other utilities. The Company's interchange partners are located throughout the Southeastern United States and include investor-owned utilities, municipalities, and electric generation and transmission cooperatives. The interchange contracts provide flexibility to accommodate ongoing transactions to meet different operating needs. The individual sales occur under one of a series of service schedules, which provide service options like emergency, short-term firm and economy energy service.

As is common in the industry, these service schedules provide pricing methodologies, rather than a pre-determined price. For example, a sale may be priced at incremental cost plus losses and a capacity reservation charge. Or, the methodology may specify a split-savings rate which can fluctuate but is set half-way between the seller's incremental cost and the buyer's decremental cost. Under these schedules, Florida Power may at times be a seller and at times be a buyer. Therefore, it is important that both interchange partners share a common understanding as to how the pricing methodologies will be followed over time.

**Q. Please explain how purchase and sale transactions are accomplished on the Florida Energy Broker.**

A. A number of generating utilities in Florida participate in the Energy Broker system as a means of maximizing hourly economy energy transactions. The Broker enables the participants to match sell quotes

and buy quotes for hourly energy transactions. A computer which is housed at Tampa Electric Company matches the lowest sell bids with the highest buy bids in succession. The goal of this process is to maximize statewide savings available through hourly economy energy transactions.

**Q. Do the Broker transactions occur automatically?**

A. No. Once the computer matches the buy-sell quotes, the individual utilities must contact each other and schedule a transaction. There are no rate schedules or service agreements that make up the Energy Broker. In order to transact business, the buyer and seller must have a separate interchange contract which sets out the terms for their economy energy transactions.

**Q. What interchange schedule is used to make Broker sales?**

A. Broker sales are made under Schedule C of the buyer and seller's interchange contract. Schedule C is an economy energy rate schedule under which the price is based on a half-way split between the seller's system incremental cost and the buyer's system decremental cost.

**Q. Is there consistency in the way that Energy Broker participants compute their incremental and decremental cost quotes?**

A. I believe that there is a general understanding among the participants as to how these quotes are derived. This is not an issue over which disputes typically arise.

**Q. Is this consistency promoted by the Energy Broker system?**

A. Yes. The Energy Broker guidelines promote consistency by laying out a framework for the calculation of incremental and decremental cost quotes. A copy of those guidelines can be found in my Exhibit 17 (HIS-6). The guidelines devote several pages to a description of the "Costing Methodology of Economy Energy." They explain, for example (at page 7) that:

> Generally, bilateral contracts specify that all identifiable incremental costs for a particular hourly transaction should be included in price quotations. These prices may include:
>
> a) System incremental fuel cost (*e.g.*, derived from composite heat rate curves of all units' curve [sic], times the incremental replacement cost of fuel.)
>
> b) Incremental transmission cost.
>
> c) Incremental operation and maintenance cost.

**Q. When does Florida Power make interchange sales on an off-Broker basis?**

A. There are many occasions and reasons to sell power off-Broker. First of all, as I said earlier, the Broker only handles hourly transactions. Longer-term sales necessarily would be made off-Broker. Also, the Broker only deals with economy energy transactions. Therefore, any sale that has a capacity component (*e.g.*, short-term firm, assured capacity and energy, etc.) would be made off-Broker.

**Q. When Florida Power quotes prices for off-Broker sales, does it use the same basic pricing methodology as you have described for Broker transactions?**

A. Depending upon the nature of the sale and the contract or service schedule that best fits the circumstances, the total price quote may differ. For example, a short-term firm sale price would include a capacity charge in addition to an energy charge reflecting the incremental cost of the unit(s) from which the energy will be supplied. However, the basic principle applies both on and off the Broker that, in establishing an energy price component, the Company will recover at least the cost of generating (or purchasing) the MWh of energy that is being sold. This is consistent with the Broker guideline which requires that incremental cost pricing for Broker sales will be calculated in the same way that the participant calculates incremental cost data for its other system operating purposes.

**Q. Can you give an example of an off-Broker agreement that captures the full generating cost concept that you have explained?**

A. Yes. A good example is the Contract for Purchases and Sales of Scheduled Power and Energy between Florida Power and Florida Power & Light Company. (Exhibit 1 (HIS-7)). That contract states that no transaction will be priced below the seller's incremental cost, and it defines the seller's incremental cost as follows:

> The Seller's Incremental Energy Cost shall be the Seller's incremental fuel cost for load dispatching in effect at the time of the transaction as determined by the Seller, which calculation shall include any start-up costs incurred in the

> event a unit needs to be started to supply Scheduled Power and Energy and the cost of the incremental system transmission losses attributable to the Scheduled Power and Energy transaction. The order of priority used to determine the Seller's Incremental Energy Cost will be such that the Scheduled Power and Energy provided under this CONTRACT will be the increment immediately above (*i.e.*, will be deemed to be provided after): (1) the Seller's retail and wholesale load requirements, including spinning reserves; (2) sales of firm capacity and energy; and (3) sales under other prior commitments into which the Seller may have entered.

Incremental cost here is being defined by reference to the fuel used to generate a block of energy above the energy needed for immediate native load purposes.

**Q. Mr. Shanker argues that Florida Power must use different methods to calculate incremental cost during "normal" conditions and during minimum load conditions. (Shanker, pages 42-43). Do you know of any precedent for this methodological distinction among Florida utilities?**

A. No.

**Q. Is it typical for utilities in Florida to quote interchange sales prices at or near zero?**

A. No.

**Q. Mr. Slater describes his understanding of "dump energy" practices among utilities in two power pools. (Slater, page 13). Does such a dump energy practice make sense here?**

A. I see no particular relevance to the pricing arrangements that might be practiced in the New York Power Pool or the PJM Pool. Moreover, Mr.

Slater expects Florida Power to "dump" energy below the cost incurred to generate (or purchase) it solely so that the QFs can continue receiving higher as-available energy payments. This is nothing more than a subsidy from the ratepayers to the QFs -- one form of negative cost impact to mitigate another form of negative cost impact.

**Q. Do you agree that Messrs. Shanker and Slater are properly measuring the cost of Florida Power's generation (or purchases) during minimum load conditions?**

A. No. These witnesses lose sight of one very important consideration. In the unit cycling scenario described in the Curtailment Plan, Florida Power experiences a clear negative avoided cost which warrants QF curtailments and a corresponding avoidance of as-available energy payments. As an alternative to the negative cost impact which justifies a curtailment, OCL/Pasco would like Florida Power's ratepayers to accept another negative cost impact -- that is the impact of selling power for less than it cost the ratepayers to generate the power or purchase it (including the purchases from the QFs). In fact, Florida Power's true cost in a minimum load period must take into account the impact of the QF purchases.

**Q. Please respond next to Mr. Slater's contention that Florida Power cannot establish a negative avoided cost unless it can show a direct increase in production costs. (Slater, page 10).**

A. This statement is inconsistent with Mr. Slater's agreement that, when calculating a utility's avoided cost, "it is wholly appropriate to capture all recognizable costs associated with the utility meeting the demands of its customers." (Slater, page 17). More importantly, though, Florida Power has shown that when forced to begin cycling the Crystal River Coal units, additional production-related costs will be incurred; the only real question posed by OCL/Pasco is when this will occur.

Mr. Slater has placed the cart before the horse. He presumes that no cycling scenario will ever arise because Florida Power can first give power away off-system without having a direct impact on additional production costs. In fact, however, his proposal to sell power off-system at less than the full cost of producing (or purchasing) those particular MWh would have a direct adverse cost impact on Florida Power's ratepayers by forcing them to subsidize continued QF purchases. In the FERC's words, which are quoted in Mr. Dolan's testimony, these off-system sales "would not be just and reasonable to the consumers of the electric utility, because it would result in increased costs to the system's ratepayers." Therefore, giving away power at a price of zero should never be required as a mitigation measure, and absent this mitigation measure and the other excessive measures proposed by OCL/Pasco, there is no question that the unit cycling/increased production cost scenario results.

Q. Do you have any other criticism of Mr. Slater's pricing theory?

A. Yes. Acceptance of Mr. Slater's theory would lead to absurd results. He says that "FPC can offer the excess generation at any price above zero without causing the avoided cost calculation to show a negative result." This is because, according to Mr. Slater, "the price at which the excess is offered for sale is unrelated to costs incurred to produce and is therefore irrelevant to the calculation of avoided costs." (Slater, page 12).

If the price, indeed, could never be relevant because it has no impact on the cost of production, then the same argument would suggest that Florida Power should be prepared to *pay* a would-be purchaser to buy the excess energy. In other words, Mr. Slater has given no reason for a pricing floor of zero.

Obviously, in this absurd extension of Mr. Slater's argument, the Company would be incurring a direct, measurable cost in the form of a payment to the power purchaser, yet Mr. Slater's rationale would consider this cost wholly immaterial.

**Q. Please elaborate on your point that selling power at prices at or only slightly above zero during minimum load conditions to avoid curtailing QF purchases would result in an unwarranted subsidy from the native load customers.**

A. Exhibit [ ] (HIS-8) shows the as-available energy prices that were being paid to QFs in each hour during which the seven initial curtailments

were made. The payments ranged from $13.47 to $17.04 and averaged $15.62. These payments are equivalent to the system incremental energy cost that would have been incurred to generate a block of energy as large as the combined as-available QF energy deliveries in each hour. During the minimum load curtailment events, this cost would have been based entirely or mostly on the cost of coal-fired generation.

When Florida Power is generating coal-fired energy at about $15 and purchasing QF energy at about $15, then it can sell any temporarily excess energy at or above the $15 threshold and either remain revenue neutral or perhaps realize some revenue benefit for native load customers. On the other hand, if the Company were compelled to sell this energy at, say $1, simply to continue purchasing QF energy at $15, then there would be an obvious subsidization of the QFs by the Company's native load customers. In order to avoid curtailing the QFs, Florida Power's ratepayers would realize inadequate revenue credits to offset their incurred generation costs.

**Q. In the situation you have described, would the Company's customers be incurring costs that they would not have incurred in the absence of the QF purchases?**

A. Yes, they would. Let me elaborate on my example to illustrate this point. Suppose that:

- In HOUR 1, the Company has a minimum load of 2,000 MW, and is supplying that load as follows:

- 1,800 MW of Company generation, plus
- 200 MW of QF purchases;

- In HOUR 2, the Company's minimum load is 1,700 MW, so the Company reduces its own generation to 1,650 MW, which consists (rounded) of 795 MW from Crystal River 3; 260 MW from Crystal River 1 and 2; and 600 MW from Crystal River 4 and 5;

- The Company's production cost for an additional 50 MW in HOUR 2 is $15 (based on to the price of coal applied to the heat rate curve(s) of the Crystal River coal unit(s) that would be ramped up to generate that increment of energy);

- The as-available energy price being paid to QFs for their 200 MW purchase block is roughly the same $15 per MWh coal cost;

- Florida Power has unsuccessfully attempted to market power both on and off the Energy Broker in 50 MW blocks at any price at or above the $15 per MWh production cost.

To further reduce Florida Power's own generation would require it to cycle off a Crystal River coal unit. This would cause the Company to incur some measure of negative avoided costs. Therefore, under the Curtailment Plan, this is the point at which QF curtailments would be initiated. Florida Power would curtail the purchase of 150 MW of QF energy for HOUR 2 (1,650 MW Company generation + 200 MW QF generation - 1,700 MW load = 150 MW excess).

Assume, however, that instead of this justifiable curtailment, the Company continued to purchase the unneeded 150 MW at $15 per MWh, while simultaneously selling 150 MW of energy at a price of only $1 per MWh. In this example, the Company's net costs would be unjustifiably increased by the differential between the $15 per MWh production (and QF purchase) cost ($2,250) and the $1 per MWh revenue recovery ($150). This $2,100 net cost is a direct result of the

sale of an equivalent amount of energy at less than the cost incurred to supply that energy. As I have said, this cost would be borne by the native load customers, contrary to the objectives of PURPA.

**Q. Mr. Shanker gives an example at page 43 of his testimony using different numbers in an attempt to show that Florida Power is incorrectly measuring its energy costs during minimum load conditions. Is there a logical foundation for his hypothetical system conditions?**

A. No. Mr. Shanker has assumed an infeasible operating scenario. He then draws an unsupported conclusion regarding the cost (or perhaps the value) of a 100 MW block of Company-generated (or purchased) energy which he assumes to be in excess of the Company's needs.

**Q. What's wrong with Mr. Shanker's assumed operating scenario?**

A. Mr. Shanker assumes that neither utility generation nor QF purchases can be reduced from the levels stated in his example. In reality, either of these generation sources can be reduced if it becomes necessary to do so. The 100 MW block of energy that Mr. Shanker assumes will be produced (or purchased) irrespective of load would not be produced (or purchased) under actual operating conditions.

**Q. In Mr. Shanker's example of a 2,000 MW load and 2,100 MW of generation (1,800 from Company units, 100 from the Southern Companies and 200 MW from QFs), how would the Company go about adjusting the resources to match the load?**

A. If we expected such a condition to materialize, we would take steps to deal with it before it arose. As specified in the Curtailment Plan, we would attempt to avoid the excess generation condition by reducing (or selling back) the purchase from the Southern Companies. If the 100 MW assumed purchase from the Southern Companies could be avoided, the generation and load could be brought into balance without need for further reductions in either Company or QF generation.

**Q. What else would the Company do to respond to Mr. Shanker's hypothetical operating condition?**

A. If necessary, Florida Power would lower its self-generation at least to the normal minimum generation levels shown in the Curtailment Plan. As summarized in my earlier example, this would enable the Company to bring its self-generation to about 1,650 MW or 150 MW *below* the minimum generation level assumed in Mr. Shanker's example. In fact, only a portion of this potential 150 MW reduction would be needed to eliminate the entire 100 MW excess generation condition assumed by Mr. Shanker.

**Q. So is it fair to say that Mr. Shanker's hypothetical condition would not occur under actual system conditions?**

A. That is correct.

**Q. If one were to reformulate Mr. Shanker's example so that (1) Company generation already was at the 1,650 MW normal minimum level, *and* (2) Southern Companies purchases already were reduced to a minimum, *and* (3) the Company was making 200 MW of QF purchases at as-available prices, *and* (4) load and generation were in balance, *but* (5) in the next hour the load was expected to decline by another 100 MW such that an excess generation condition was expected, would it then be correct, as Mr. Shanker suggests, that Florida Power would have no discretion to further reduce generation?**

A. No. Even in that more plausible example, Florida Power would not (and for reliability reasons could not) allow the assumed excess generation condition to materialize. Therefore, it *would* further reduce system generation by 100 MW. The main issue in this case is whether that reduction must come from a Company unit (*i.e.*, a cycling event) or whether it could be accomplished with a permitted curtailment of 100 MW of the assumed 200 MW QF supply. Because the cycling scenario under these system operating circumstances would cause the Company to incur negative avoided costs, the Curtailment Plan would authorize a 100 MW QF curtailment in this situation.

Only by incorrectly presuming that Florida Power can *never* curtail any portion of its QF purchases to avoid excess generation in minimum load conditions, could Mr. Shanker draw the equally incorrect conclusion that "FPC can not save any money by producing less [or purchasing less from the QFs], because it cannot produce less [or purchase less from

the QFs)." This circular reasoning ignores the Company's legitimate curtailment rights.

**Q. You previously stated that, if one were to accept the Shanker/Slater pricing contentions, one would also have to conclude that the QFs are being paid too much for as-available energy. Can you please elaborate?**

A. Certainly. The fundamental notion of avoided cost pricing is that the QF supply enables the purchasing utility to avoid the alternative cost of generating or purchasing an equivalent amount of needed capacity and/or energy. For present purposes, I am focusing only on the as-available energy.

The basic premise of the Shanker/Slater theory is that, in minimum load conditions, we are dealing with a disposal of "excess energy" which is not needed by Florida Power and which allegedly has a cost to Florida Power of zero. If that were assumed to be true (and I don't agree with the zero cost assumption), then Messrs. Shanker and Slater could not possibly argue in good faith that, as to the number of MWh of excess, any QF is (1) enabling the Company to avoid generating that energy, or (2) enabling the Company to avoid an energy production cost. The same energy amount cannot be a zero cost resource from Florida Power's perspective, but a much higher cost resource when it is supplied by the QFs. In fact, because of the way in which avoided energy cost pricing is determined, the block of QF-supplied energy theoretically should be priced at or near the price of energy which is

sold on the interchange market. The only reason for a significant difference in price would be a difference in the relative block sizes of the interchange sales and the QF purchases. In other words, if one accepts the Shanker/Slater analysis, then an equivalent sized block of QF energy would be priced at or near zero.

**Q. Please elaborate on the pricing procedures under which the QF energy theoretically should be priced at or near zero in the Shanker/Slater framework?**

A. The Commission's Rule 25-17.0825(2)(a) describes the required method for determining as-available energy prices for QFs. It says that:

> Avoided energy costs associated with as-available energy are defined as the utility's actual avoided cost before the sale of interchange energy.

The Commission has explained that the reason for looking at the as-available price *before* interchange sales is to ensure that the utility's ratepayers (and not the QFs) will realize the benefits from interchange sales. For example, in Order No. 12634, Docket No. 820406-EU (October 27, 1983) at pages 10-11, the Commission stated:

> The rule defines avoided energy costs as a utility's actual hourly incremental costs for those hours during which no economy energy transactions occur, actual incremental costs after the purchase of economy energy, or actual incremental costs before the sale of economy energy. It is necessary to calculate avoided costs before economy energy or broker sales and after broker purchases to preserve the benefits of the Florida energy broker system for the ratepayers of the participating utilities. Broker purchases enable a utility to lower its overall fuel costs by purchasing energy at a price less than what it would have cost the utility to generate the power itself. This opportunity to lower fuel costs should be preserved; it is preserved if avoided energy prices for QFs

> are calculated after such purchases have occurred. Broker sales also benefit a utility's ratepayers because we required the profit from broker sales to be accounted for when a utility's base rates are set. The level of income realized from broker sales would decrease if the costs to produce energy sold on the broker system were increased by calculating avoided energy prices for QFs after such sales have occurred. The level of income from broker sales is less affected by the presence of QFs on the utility's system if avoided energy prices for QFs are calculated before broker sales occur. Because we do not believe other ratepayers should experience an increase in the cost to serve them as a result of the presence of QFs, we reject Dade County's contention that avoided energy costs should be calculated after broker sales have occurred.

Pricing QF energy *before* interchange sales means that the QF price is derived without reference to the off-system sales - - in other words, based on the same increment of energy that would have been sold on the interchange market. Except for a potential difference in the size of the off-system sale block and the as-available energy block, the two prices should be approximately the same. It is logically not possible to correctly suppose a condition in which economy energy sales should be priced at approximately zero, while at the same time, an equivalent amount of as-available energy is being properly priced at a level much higher than zero.

**Q. Do you have any other comments on the OCL/Pasco proposal that Florida Power be required to further mitigate curtailments by modifying the way it (and its interchange partners) determine incremental cost?**

A. Yes, just two points. First, Mr. Dolan's rebuttal testimony reveals that the FERC had a very good opportunity to put an explicit off-system sales mitigation requirement into its curtailment rule. FERC did not do

that even though two fellow regulatory agencies had asked it to; indeed, as explained by Mr. Dolan, FERC stated that its rules do *not* require a utility to deliver unneeded energy to any third party. Mr. Dolan also shows that this Commission's rules simply encourage off-system sales of unneeded QF energy and only where the sale price is cost-effective to the ratepayers.

Second, Florida Power has no objection if OCL/Pasco want to market their own curtailed energy to a third party (at any price they choose, including a price below, at or above their own production costs). Section 6.3 of the contracts with these parties lets them dispose of their curtailed energy in any way they choose. That section also says that Florida Power has no obligation to transmit curtailed energy amounts to third parties. But, notwithstanding that provision, Florida Power is certainly willing to wheel their energy to another buyer under the Company's open access transmission tariffs.

## 4. Retail Sales At Discounted Prices

**Q. Mr. Shanker also suggests that Florida Power should cut its retail prices in order to encourage off-peak demand increases. (Shanker, pages 45-46). Please respond.**

A. This is really nothing more than an extension of the low-cost wholesale sale proposal. Mr. Shanker is again attempting to create the false impression that the minimum load problem can be handled exclusively

as a demand-side problem rather than a supply-side problem. For all the reasons I have given on the wholesale side, I also strongly disagree with Mr. Shanker's unsupported retail pricing proposal.

**Q. Does Florida Power already have measures in place to create economic incentives for its large industrial customers to increase consumption during off-peak periods?**

A. Yes. Florida Power currently has a time-of-use rate which includes two pricing tiers to reflect peak and off-peak usage.

**Q. Has Florida Power considered whether additional pricing incentives might be used to increase retail demand and thereby help to alleviate the minimum load problem?**

A. Yes. The Company has considered the possible creation of a three-tier retail industrial rate which would separately price energy for the midnight shift hours. However, given the nature of the Company's retail industrial load, this investigation concluded that there was no significant opportunity to increase the retail demand through further price cuts. All that would have resulted was a windfall price reduction to the industrial customers.

**Q. Do you agree that Mr. Shanker's example (Shanker, pages 45-46) of industrial cogenerators reducing the output of their internal cogeneration systems represents a viable method of alleviating minimum load conditions?**

A. No. There are no industrial cogenerators on the Florida Power system with generation that is not integral to their manufacturing processes. Therefore, there are none that could have any impact on the problem. Because the cogenerators' thermal processes are linked to the use of their own generating equipment, they could not shut down their generators, as Mr. Shanker suggests, without simultaneously stopping their entire production process.

**Q. Do you believe that Mr. Shanker's cut-rate retail pricing proposal has any merit?**

A. No. Even if otherwise in the interest of Florida Power and its ratepayers, reductions in the existing time-of-use pricing would not be likely to materially affect the midnight shift load patterns, especially not in the short-term period when we most need to deal with the minimum load problem.

Florida Power is in the business of selling electricity. It benefits the Company and its customers whenever we can increase demand to make use of available generating resources. But, it is not in anyone's interest, except perhaps OCL/Pasco's, if we pay more to generate or purchase power than we receive when we sell that power. This proposition seems clear to me. Reducing retail rates to continue buying QF output at higher rates means (1) the QF output is not needed, and (2) our other customers are subsidizing the QFs by receiving too little on the sale side and paying too much on the purchase side. The only beneficiaries are

the QF end, in Mr. Shanker's proposal, the individual retail customer who happens to get a reduction in his rates.

## B. OCL/Pasco's Negative Avoided Cost Criticisms Do Not Undermine Florida Power's Curtailment Plan

### 1. Florida Power's Timeframe For Avoided Cost Analysis

**Q. Do you agree with the assertions made by Messrs. Shanker and Slater that Florida Power has used the wrong time frame to calculate negative avoided costs?**

A. No. The Company explained in a conceptual way and made model runs to illustrate that negative avoided costs would have occurred during the seven curtailment events if no curtailments had taken place. The Unit Commit model runs were made over periods ranging from one to three days. The time period examined was more than sufficient to capture the full impact of negative avoided costs as a result of not curtailing. At a minimum, these impacts consist of increased costs due to baseload unit start-up costs and higher generation costs during the period when a baseload unit is shut down. These increased costs occur during the day of the minimum load event, assuming, as we did, that the baseload unit can and does return to operation at the end of the minimum shut-down period (typically six to eight hours). Our comparative analyses all cover the period during which these increased costs occur, and therefore cover the appropriate time frame.

**Q. Would the negative avoided costs shown by Florida Power "vanish" as Mr. Slater claims if the Company followed the negative avoided cost calculation methodology suggested at pages 23-24 of Mr. Slater's direct testimony?**

A. No. While I do not fully understand Mr. Slater's methodology, his scant description seems to suggest that Florida Power should presume that the maximum curtailment amount was curtailed in every hour (off-peak and on-peak) for some period longer than the actual curtailment period and up to a week. Mr. Slater evidently would assume a week-long curtailment at the level needed to resolve the most severe one-hour minimum load problem.

Even if Florida Power had perfect knowledge up to a week before a minimum load condition, it would be draconian to curtail QFs at that level for the entire week and would deprive ratepayers of any benefits from QF purchases during all but the most severe minimum load hours. While we have not performed such an analysis, it is obvious that the replacement energy in the "curtailment case" during hours outside the most severe minimum load hours, including on-peak hours on the following day or days, would offset the start-up costs or increased energy costs due to cycling a baseload unit in the "no curtailment" case.

**Q. Do you agree that Mr. Slater's method is appropriate for use in calculating negative avoided costs?**

A. No. Florida Power has constructed a reasonable proxy to illustrate what theoretically would have happened on the system and that negative avoided costs could be expected in the absence of *actual* curtailments. Mr. Slater seems to be suggesting that we measure the impact of *hypothetical* curtailments that never occurred. It would be inappropriate and not in the interests of either QFs or ratepayers to implement actual curtailments as Mr. Slater suggests.

In fact, Mr. Slater's methodology could be extended even further. To carry his approach forward, Florida Power presumably could curtail the maximum amount of QF power needed to avoid any minimum load condition for a period up to several years until there is no longer any potential for a minimum load condition. In this application, every hour of the several-year period would have curtailment at the maximum level expected during the period. Obviously, this would be inappropriate.

2. Florida Power's Reference To "Unit Impact" Costs Of Cycling

**Q. OCL/Pasco do not agree that the type of costs which you and Mr. Lefton describe as "unit impact" costs are properly included in a calculation of negative avoided cost. Please respond.**

A. Mr. Slater concedes that "[i]n calculating utility avoided costs, it is wholly appropriate to capture all recognizable costs associated with the utility meeting the demands of its customers." (Slater, page 17). We have only recently received the results of Mr. Lefton's analysis and I

would say that we need to evaluate these cost impacts further before I would be comfortable using a specific "unit impact" number or set of numbers for system dispatch purposes or for avoided cost pricing. Nevertheless, I am confident that the Company is incurring the type of per-event cycling costs described by Mr. Lefton and that they should be "captured" as "recognizable costs associated with the utility meeting the demands of its customers."

Mr. Lefton has submitted separate rebuttal testimony answering several specific points raised by Mr. Slater. But, I want to emphasize one critical point. "Unit impact" costs, as measured by Mr. Lefton, represent the *incremental* cost of each additional cycling event. As such, the present value portion calculated on a per cycling event basis would be incurred *whenever* a Crystal River coal unit was forced to cycle off in order to continue a QF purchase. And, as such, these costs certainly do represent part of the negative avoided cost of each cycling scenario.

**Q. Do any of Mr. Slater's criticisms of Mr. Lefton's "unit impact" cost analysis alter your negative avoided cost conclusions?**

A. No. I think that Mr. Lefton effectively responds to the specific criticisms. In any case, though, even if the Commission were to question the magnitude of Mr. Lefton's measured cycling costs, my conclusions would be unaffected. This is because of two reasons. The first reason is that we have chosen to use Mr. Lefton's analysis in a

very conservative way. While his study showed that a per-cycle cost may be greater than $100,000 for a unit like Crystal River 2, we used a much lower figure in our negative avoided cost comparisons.

Q. What is your second reason?

A. The second reason is even more significant. My direct testimony establishes that Florida Power would realize negative avoided cost in minimum load conditions without curtailments, *even without taking into account the effects of Mr. Lefton's "unit impact" costs*. The start-up fuel and maintenance, and repla
cement power costs which Florida Power already captures in its economic dispatch procedures are of sufficient magnitude to produce a negative avoided cost in and of themselves. Mr. Slater has not offered any credible evidence to dispute this fact.

### 3. Alleged Unit Commit Errors

Q. Mr. Slater claims in his direct testimony to have uncovered three "significant problems" with Florida Power's negative avoided cost calculations. (Slater, page 27). How do you respond to these contentions?

A. Florida Power disagrees with the assertion that there were any "significant problems" which would negate the conclusions drawn from either its conceptual or its numeric analyses of negative avoided costs. Because there is a clear interrelationship between the three "problems"

listed in Mr. Slater's direct testimony and the somewhat more detailed assertions presented in his April 25th supplemental testimony, we are evaluating those allegations as part of a thorough review of the Unit Commit simulations. The results of that review will be presented before the hearing in this docket in a further piece of Company rebuttal testimony.

For present purposes, I would, however, like to stress that it is important to keep in mind what the Unit Commit simulations are -- and what they are not. Before a minimum load curtailment event, we must anticipate the levels of available resources and customer demands. The Company has considerable experience making these projections, but this is not an exact science, particularly when we must also predict the operational responses of the QF power suppliers. What I have shown is that whenever the minimum load conditions would cause the Company to cycle a baseload unit, we can be certain that the Company, as a result, would incur net increased operating costs, or a negative avoided cost. As contemplated by the FERC rules and this Commission's rules, the Curtailment Plan lets the QFs know this information *in advance* of the event so that we can avoid this very condition from actually occurring.

The after-the-fact Unit Commit simulations which we ran are not, and could not be, an exact measurement of the Company's negative avoided costs. Furthermore, they should not be used to discredit the planning

and operational decisions that were made before a curtailment (*e.g.*, the specific curtailment amounts which allowed us to prevent the negative avoided cost). This is because the Unit Commit runs represent an after-the-fact reconstruction to illustrate how the system reasonably might have responded *if* the actual curtailments had not occurred. The after-the-fact "what-if" simulations are based on different information than what we knew before-the-fact. For example, the actual curtailments had to be based upon projected loads and resources. However, these Unit Commit simulations reflect actual loads. Instead of projected QF deliveries, they reflect the actual curtailments that were made.

In my estimation, no such after-the-fact Unit Commit simulations would exactly corroborate planning decisions that were made before the event. Nor would they exactly measure the cost differential between operating scenarios with and without curtailment. But our simulations were very conservative and more likely understate than overstate the magnitude of any negative avoided costs. For instance, they do not capture all of the potential "unit impact" costs of cycling and they assume optimal start-ups, ramp rates and other system responses. In practice, start-ups often take longer (and incur more costs) than we anticipate, QFs may not respond exactly as instructed by the Plan, and numerous other conditions could be less than optimal. The Unit Commit runs help to illustrate my point that it is intuitively apparent before the minimum load condition that the unit cycling scenario would produce negative avoided costs and that the curtailments are justified under the circumstances

described in the Plan. The Unit Commit runs are not intended to prove after-the-fact the exact magnitude of the negative avoided cost that the Company was able to prevent by making the curtailment decision.

C. The Curtailment Plan Is Not Unfair To QFs Or Any Particular QF

Q. Mr. Yott claims that the Curtailment Plan is unfair and discriminatory against OCL. (Yott, page 5). Is it true that OCL is treated unfairly under the Plan when it comes to output reductions during minimum load periods.

A. No. Probably the best evidence that the Curtailment Plan includes a reasonable set of curtailment priorities and treats all QFs fairly is the fact that OCL is the only QF out of 22 affected QFs who has filed testimony complaining that they are unfair. Even Pasco is not named as a co-sponsor of the Yott testimony, as it is with respect to the Shanker and Slater testimony. Moreover, a number of other QFs who have agreed to voluntary output arrangements affirmatively support the Plan's curtailment priorities. These QFs recognize that all of Florida Power's QF suppliers are not similarly situated and that the curtailment groupings used in the Plan fairly reflect these differences in circumstances.

As Mr. Dolan confirms, all of our QF suppliers including OCL have been given numerous opportunities to be included in the first priority curtailment category (Group A).

**Q. Does the Plan unfairly treat QFs as a class of wholesale power supplier?**

A. I do not see how the Plan possibly could be said to disadvantage or unfairly treat QFs as a class of wholesale power supplier. I say this because the Plan in fact gives a superior curtailment priority to QF suppliers than it does to the Company's own generating equipment and its avoidable power purchases from other electric utility companies. Before curtailing any QF under Rule 17-25.086, the Plan requires Florida Power's system operating personnel to (a) curtail purchases from Tampa Electric and the Southern Companies as much as possible (as noted earlier, we have gone the extra mile to negotiate even greater curtailment capability with Southern since filing the Plan); (b) shut off its own intermediate and peaking units and reduce baseload units to minimum acceptable operating levels; and (c) shut down its own cogeneration plant entirely if operating conditions permit. The Company is asking QFs to participate in the minimum load solution through involuntary curtailments only after all other generating resources have been substantially curtailed.

**Q. Please explain why Florida Power does not consider the Group A, B and C classification of QFs for curtailment purposes to be unreasonable or unfair.**

A. Placing the QF suppliers into one of the three curtailment categories properly recognizes that all QFs are not similarly situated in terms of the product that they are making available to the Company or the costs that they allow the Company to avoid. One major distinction applies to as-

available energy supplies which are consolidated into Curtailment Group C. There has been no real quarrel by any party with the notion that as-available energy supplies are inferior to firm power supplies in terms of dependability and cost avoidance. As-available energy purchases are not assured in terms of amount, time or certainty of delivery. This is true whether the as-available energy is purchased separately or as an amount above and beyond the committed capacity under a firm QF contract. Because as-available energy offers the least value to the system, it is reasonable to interrupt those purchases before a firm power purchase is interrupted. Therefore, the Group C as-available purchases are the first purchases to be curtailed under the Plan.

There is just as real and material a distinction between the Group A and B QFs because none of the Group B QFs has agreed in writing to provide firm output reduction commitments to help avoid or mitigate the system's minimum load problems. Group A QFs, in contrast, have agreed to provide the system with a significant benefit by clarifying or enlarging the output reduction arrangements under their existing contracts to establish predictable voluntary output reductions that the Company can count on. Florida Power believes that it is both necessary and appropriate to recognize this difference in quality of service during minimum load hours in the distinction drawn between the Group A and B curtailment priorities. We have also agreed to do this as a part of the voluntary output reduction arrangements negotiated with the Group A suppliers. As noted in Mr. Dolan's direct testimony (at pages 24-25),

the Company gave the Group A QFs assurance that it would seek to obtain maximum curtailment from *other* QFs before asking the Group A QFs for more than their voluntary output reductions. We believe that the 50 percent curtailment cap applied initially to the Group B QFs (which has not been contested by any party) is consistent with this maximum curtailment commitment without being overreaching or unreasonable.

**Q. Do you think it would be fair to ignore the factual distinctions between the Group A, B and C QF suppliers?**

A. No. I would have a hard time justifying a plan that ignored the voluntary contribution made by the Group A QFs or that treated as-available energy as if it were firm. These differences cannot be ignored if we are to be fair to all QFs.

~~OCI, in effect, claims a preference rather than fair or comparable treatment. Because it claims to be voluntarily (at its sole option) offering some possible output reductions on a short-term basis during minimum load periods, it wishes to be grouped together with other QFs who have been willing to put specific and ongoing output reduction commitments formally in writing. The fact remains that Florida Power cannot depend upon any output reduction from OCI to manage the minimum load problem as it can from those QFs who are included in Group A because of their firm written commitments~~. In effect, just as it makes sense to distinguish between (1) as-available energy (which is

not committed) and (2) firm energy (which is committed), it also makes sense to distinguish between (3) optional QF output reductions (which are not committed) and (4) written QF commitments to reduce output (which are committed).

**Q. Is it your understanding that treating differently situated QFs in a way that accounts for these differences is consistent with the PURPA rules?**

A. Yes. Under the PURPA rules, it seems to me that different treatment of QF suppliers who are not similarly situated is perfectly appropriate. For example, there always have been distinctions between the treatment of as-available energy versus firm energy. Similarly, in the realm of QF pricing, the rules allow consideration of numerous case-specific factors such as the dependability of a QF's power supply and the extent to which the QF enables the utility to avoid capacity and/or energy costs.

It has even been pointed out to me that in 1988, the FERC explained that PURPA doesn't appear to prohibit rate discrimination *among* individual QFs, as opposed to rate discrimination *against* QFs as a class of power suppliers. The FERC also explained that differences in circumstances, in any event, will frequently justify differences in treatment of particular QFs. I find the FERC's observations instructive:

> No court cases have definitively construed the meaning of discrimination in the context of rates for purchases of power from QFs under section 210, but the most reasonable reading of PURPA precludes discrimination against QFs as a class; it does not require that all QFs be treated the same. The Commission's current rules allow for different rates for QFs. The rules recognize that avoided cost will tend to decline as more

> QFs enter the market. The Commission's current rules also set the price at full avoided cost, but also provide for negotiated rates that fall below full avoided cost. Certainly, negotiations do not result in the same rate for all QFs. QFs offering different services or different prices are not similarly situated. Thus, differentiation among QFs is not necessarily discriminatory.

(*See* Regulations Governing Bidding Programs, IV FERC Stats & Regs ¶ 32,455 at 32,027 (1988) reproduced in part in Exhibit 17 (HIS-9)). Clearly the distinctions between the Group A, B and C QFs in Florida Power's Curtailment Plan are justified by differences in factual circumstances. I believe that making these distinctions is fair and that ignoring them ~~as proposed by Ms. Yott~~ would be unfair.

Q. ~~Is Florida Power still willing to treat QSs as a Group A QF if it is willing to enter into a written arrangement providing ongoing and assured output reductions comparable to those agreed to by the other Group A suppliers?~~

A. ~~We would be pleased to sign up all Group B QFs to mutually acceptable written output reduction plans because this would simplify the burden of dealing with the minimum load problem. Any Group B QF, including QSs, is encouraged to do so.~~

Q. ~~Mr. Yott would like to see the Curtailment Plan include a "banking" arrangement which would give credit to QFs when they overcurtail on one occasion so that they can avoid curtailment on another occasion. Likewise, his proposal would debit QFs who underperform. (Yott pages 10-12).~~ First, is it correct, as Mr. Yott suggests, that Florida Power is

making "value judgments about the QFs' individual [compliance] circumstances"?

A. We are certainly attempting not to do so. As explained in my direct testimony (at pages 50-51), we recognize that QFs may occasionally experience temporary, uncontrollable operating conditions that will prevent their strict compliance with the Curtailment Plan. Just as we would expect to accommodate those circumstances at our own plants, we intend to accommodate them at the QF plants. Toward that end, Mr. Charles Harper has issued instructions to system operating personnel confirming that they should document and accommodate QF compliance difficulties as the Company would do for its own units. Mr. Harper's instructions are set forth in a memorandum which I am including as my Exhibit 17 (HIS-10).

Q. Would the banking arrangement proposed by Mr. Yott cause Florida Power any operational problems?

A. I believe it would. When the system operators are trying to rapidly balance generation and loads, they need to have good information as to how much curtailment they can expect from each QF as well as access to effective procedures for implementing these curtailments. If any of 22 suppliers had the option of not fully curtailing at the last minute, then the system operating personnel could not reliably and cost effectively balance the generation and load levels. In addition, the operating function would become substantially more complicated. As

I have already testified, the Curtailment Plan is intended to promote predictability, ease of implementation, and effective results. I can appreciate OCL's desire to get some credit for over-compliance, but any under-compliance is highly problematic in that it (1) creates additional operating risk and (2) shifts the curtailment burden on that occasion to other QFs or to Florida Power. Even an assurance that someone will pay back tomorrow an amount which he under-contributes today does nothing to cure the minimum load problem today -- all it can do is ensure that today's problem will be worse.

**Q. Is there a better way for OCL to realize some credit if it chooses to over-comply rather than running its plant at a reduced output?**

A. This is exactly the circumstance mentioned in footnote 6 of the Curtailment Plan at page 29. If OCL wants to provide more curtailment than the system requires, I would encourage it to work with other similarly situated QFs to arrive at a sharing arrangement that may meet their mutual needs. If the system operators *know* in advance that on one occasion 80 MW of reduction is assured from OCL and on the next occasion 80 MW is assured from "X" QF, then generally speaking, the system could be run as effectively as if each of these QFs provided 40 MW of reductions on each of the two occasions. I believe that this kind of arrangement allows individual QFs to satisfy their individual operating needs without involving unwilling QFs, confusing the curtailment process or setting up Florida Power as a curtailment compliance policeman.

Let me just add that OCL seems to be the only QF complaining of a possible non-compliance problem, and Mr. Yott certainly hasn't documented any such problem. OCL seems to believe that it would be a regular over-contributor to a curtailment bank, but it has given no reason to believe that there are other QFs who would regularly under-contribute and thereby balance out the bank account. In fact, from our experience to date, I do not share OCL's belief that there will be persistent under-curtailment incidents. We are certainly expecting ongoing compliance and I would hesitate to develop a mechanism that encourages under-compliance for any reason.

If I am correct that under-compliance is not a material problem, and if OCL would like to balance out its *own* occasional over-compliance with a predictable methodology for under-curtailing on other occurrences, then this is exactly the kind of issue that might be resolved amicably by means of a voluntary output reduction plan such as we have repeatedly encouraged QFs to discuss.

**Q. Does this conclude your rebuttal testimony Mr. Southwick?**

A. Yes.

Q (By Mr. McGee) Mr. Southwick, would you give us a summary of your rebuttal testimony, please?

A Yes, it seems like most everything in my rebuttal testimony has already been discussed in some depth this week, so I won't belabor it all now. I would, however, like to emphasize two things.

First, in regard to the negative avoided cost issue, I've shown that to shut off a Crystal River baseload unit to continue purchasing an equivalent amount of QF generation would increase the cost to the ratepayers.

Furthermore, our calculations have been very conservative and more likely understate rather than overstate this result. For instance, these calculations do not capture all of the potential unit impact cost of cycling, and they assume optimal ideal start-ups and ramp rates. In the real world, for example, start-ups often take longer and incur more costs than the ideal optimal possibility. In fact, this is true well over half the time.

Second, and again involving the issue of ratepayer neutrality, is the issue of mitigation. Florida Power has done everything that is cost-effective to mitigate curtailments to go further with increased ratepayer cost. The concept has been presented of selling power off-system at a dump price, say, $1 per megawatt-hour, would increase the cost to the ratepayers. Any validity to this concept of the $1

sale is based on the assumption that our QF purchases are virtually unsaleable; in effect a take-or-pay contract. In fact, it has been established by Mr. Dolan, they are not. The contracts as well as the FERC and this Commission's rules are all based on the principle of ratepayer neutrality.

MR. McGEE: Tender Mr. Southwick for cross examination.

CHAIRMAN CLARK: Ms. Walker?

MS. WALKER: No questions.

CHAIRMAN CLARK: Mr. McGlothlin? Mr. Presnell?

MR. PRESNELL: Commissioners, I have the unenviable task of the responsibility of cross examining the last rebuttal witness on a day when the primary objective of everyone, including myself, is to get out of here, so I will try to be brief but I do have some questions if you'll bear with me.

CROSS EXAMINATION

BY MR. PRESNELL:

Q Mr. Southwick, during minimum load conditions, it's part of Florida Power's curtailment plan to reduce its own generating resources to the lowest possible level before curtailing the QFs, correct?

A Given adequate system reliability.

Q And you would admit that sometimes that's not possible. For example, on the event on October 19th you were

unable to cycle off your Bartow and Anclote units correct?

A That's correct.

Q Now, Mr. Harper, in his redirect indicated that that allowed Florida Power to bring Crystal River 4 down to a lower level than it normally would come down to. Do you recall that testimony?

A Yes.

Q Do you have a copy of Mr. Harper's testimony there with you?

A I was just handed one.

Q All right. That's because I gave your counsel warning I was going to ask you about it.

If you would turn to the back of Tab 7 and look at the minimum load emergency curtailment work sheet for that date. Are you with me?

A Not yet. What does it look like? Is that this?

Q Yes, sir. And there should be one there for October 19th. The first one. Do you see the entry there for Crystal River Unit No. 4?

A I'm not quite there yet. Where's the date on here? I'm not familiar with this sheet. This may take a while.

Q It's up in the top?

A Uh-huh. Is it written in black?

Q Well, It shows up in the white. Its in the black band.

A No, I haven't seen it.

Q Okay. Do you see the FPC units at the bottom?

A Yes.

Q And there's a summary of the output of those units for each hour during the curtailment period to the right? Would you agree with me that the Crystal River 4 unit was brought down to the 150-megawatt level only one hour during that period? That is during the hour ending at 0300?

A Yes.

Q Now, it's also true, is it not, that during some curtailment episodes Florida Power had some of its baseload coal units cycled off?

A I believe so.

Q And would you agree with me that your baseloaded coal units are routinely cycled off during the course of a year for various reasons?

A Yes.

Q In your position as the -- what, you're the head of the Energy Supply Department?

A We call it Energy Control.

Q Can you give the Commission an estimate of your four baseloaded coal units, approximately how many total times during the course of a year these units would be cycled off for some reason other than for curtailments?

A I don't have that data.

Q Would it be fair to say that an average coal unit is cycled off at least 20 to 30 times a year or more?

A I don't think that would be fair. That sounds a little heavy.

Q I'm sorry?

A I think that's too much.

Q Well, what do you think would be a reasonable range?

A Probably 10 to 20.

Q All right. Now, you would also agree with me that on more than one occasion when you curtailed the QFs you did not cycle off your own cogeneration unit at the University of Florida, correct?

A I believe there was one occurrence of that.

Q Well, I believe Mr. Harper's exhibits reflect that it was on more than one occasion, are you --

A That could be. I'm not familiar with Mr. Harper's exhibits that well.

Q All right. Now, let's talk a minute about the issue of surplus energy and your effort to sell that energy in order to avoid the necessity to curtail. And you would agree with me that an effort to mitigate and avoid curtailment by selling excess power is inherent and a part of Florida Power's curtailment plan, is it not?

A Yes, it is.

Q And when weather conditions dictate and you're

facing a minimum load, generally you have between 12 and 24 hours notice that you may have a minimum load problem, correct?

A No, I wouldn't call it notice. We have a heads up that there's a good probability that something is coming. But I wouldn't call it notice, because we don't know for a fact at that point, no.

Q Well, you have a good indication that you may have a problem?

A We have an indication that we may have a problem.

Q And as the records reflect, you know, if you think weather conditions are going to be such on the early morning of January 1st that you might reach a minimum load problem, you'll start making efforts to sell energy off-broker as early as December 30th, correct?

A We would, yes.

Q And if you anticipate having a need to shed 200 megawatts of power, you will send out a message on the bulletin board to all of the utilities in Florida to see if there is a buyer for 200 megawatts of power during the period that you think the curtailment would exist, correct?

A Well, that probably oversimplifies it. We might do that, but more likely we would make personal phone calls. We very likely may do both.

Q Okay. And if you're not successful in shedding that

power through advanced phone calls or through participation on the bulletin board, then you have available to you the Florida broker system to try to sell excess or surplus energy, correct?

A That's still available, yes.

Q All right. Now, it seems to me that the problem, or the dispute or issue that we have between Florida Power and the QFs with respect to your ability to sell that power, relates to the method by which you price that power. And if I might approach the chart for a moment, go back to the original example we had used with Mr. Harper, I want to make sure I understand your position and what the issue is.

Let's assume that Florida Power is operating its baseload facilities at its minimum. In other words, Florida Power is generating -- its own generating resources are operating at its minimum reasonable level, and that level together with the QF purchases, assuming that you have voluntarily obtained the commitments or the reductions from the QFs that are voluntary and that you're at 2,200. Now, let's assume that at that point you calculate your as-available price at $15. And as I understand it, you calculate the price at which you would sell energy, at what you believe to be your incremental cost of producing that energy, correct?

A That's correct.

Q So let's assume that you price that energy at a cost that you -- that your pricing sheet that Mr. Harper referred to is at $15. Now, let's assume that the load drops to 2,000, and you're in a surplus situation and a minimum load problem.

Is it Florida Power's position that the price of that block of energy is calculated the same way, and that you would arrive at a $15 per megawatt-hour price when you're in a 200-megawatt surplus situation the same as you would if you were operating with a balanced load?

A Yes, it would be $15.

Q And is there anything in the FERC rules or regulations that requires you to calculate your incremental cost in that fashion?

A That's my understanding, yes, sir.

Q You refer in your rebuttal testimony, Mr. Southwick, on several different occasions to pricing energy this way under "established interchange practices in the state of Florida." You see at Page 22 of your testimony? Can you tell me how is it that these established interchange practices in Florida were established among the various utilities?

A They've evolved over time, obviously. And they are all consistent, at least I know ours are, I can't speak for the others, with the FERC regulations.

Q So as far as you understand there's a general agreement among the utilities in Florida that no one will

offer power on the wholesale market at less than what they calculate their incremental cost to be, correct?

CHAIRMAN CLARK: Mr. Presnell, you need to stay near a microphone.

MR. PRESNELL: I'm sorry. I'm getting back into my old habit of pacing while I question a witness.

A I don't know of any agreement among the utilities on how to arrive at their pricing. We certainly -- I'm not aware of any.

The broker system has a guideline on how to develop pricing for the purposes of the broker, but I'm certainly not aware of any agreement we have made with any of the utilities on how to price our product or their product. We price our product based on what -- the way we do it, which is based on the FERC regulations, and they'll have to speak for themselves.

Q Well, you say it's consistent with established interchange practices in Florida, so is it your understanding that all utilities in Florida engage in this same price --

A Well, it seems to generally work that way. I've never seen anybody selling power for free.

Q No, sir, I'm not suggesting that you necessarily sell it for free.

Has Florida Power ever made an effort to go to the FERC to change its tariff to allow market-based pricing so

that you could sell your power at less than what you compute your incremental cost to be during low load situations?

A I'm not aware of such an effort.

Q Is such an effort possible?

A To get a FERC approval for market-based pricing, which has been talked about a lot recently in the industry, is a very new thing and it gets into all kinds of -- I'm trying to think of the term -- the open access transmission and some of the more recent events have gotten into a lot of issues that involve market-based pricing. We're not allowed to do market-based pricing. We're required to do cost-based pricing.

Q And it's your position that the FERC regulations require you to price your incremental cost the same when you're in a surplus situation as you would when you are at a balanced load, correct?

A It requires us to price it no less than our incremental cost at any time.

Q Well, but that's not my question. My question is, is it your position that the FERC regulations require you to reach the same result in calculating that price whether you're at a balanced load or you're in a 200-megawatt surplus situation, because that's the way you say you price your energy.

A If you define this as a 200-megawatt surplus

situation, I would say yes. I don't define it as that, because we have another alternative available to us and that alternative is to curtail the QFs and bring that 2,000 back into balance. As we said, the QFs in our opinion are not take-or-pay contracts.

Q In your opinion, QFs really aren't firm contracts, are they?

A I'm sorry?

Q In your opinion, the QFs really aren't firm contracts, are they?

A They are a firm contract. They are not take-or-pay. There's a very big difference.

Q Now, let's look at Tab 7 again of Mr. Harper's testimony. And we've numbered our pages, Page 29, and what it is, is a good ways toward the back there is a sheet reflecting the broker quotes that Florida Power made during the early morning hours of January 30th when it was curtailing the QFs. So if you'll find that sheet for me.

A 29 from the front?

Q Yes, sir.

A Okay.

Q And I'll be happy to help you find these pages if it will expedite things.

A I think I have 29 pages.

Q Okay. You see the sheet that says, "Daily Broker

Quote Report, Monday, January 30th"?

A Yes, sir.

Q Would you agree with me that that's a list of the sale quotes Florida Power made on the broker that evening in an effort to shed excess power?

A Yes.

Q Do you know why Florida Power offered to sell less energy than it needed in order to solve the curtailment?

A I suspect somebody made a judgment that we could maybe sell a block of 50 but not more. I don't know the absolute answer to that; I didn't do that.

Q And you would agree with me that your ability to sell blocks of energy on the broker depends, by and large, on the price that you offer to sell at, correct?

A Yes.

Q And you don't know to what extent there's a market for your power until you put a price on it and see if the computer matches up, correct?

A They don't know, but they have a real good idea.

Q Now, this indicates that you are pricing your broker sales in 50- to 100-megawatt blocks in the $14 range, correct, during the early morning hours of January 30th?

A Yes.

Q And if you'll go four full pages past that and turn the page, which is the backside of Page 33, we'll see the

results of those efforts. You'll see a sheet that says, "Daily Broker Schedule Report, Monday, January 30th, 1995." Do you see that?

A Yes.

Q Now, let's just walk through this one example and make sure we all understand what this information portrays.

At 1:00 in the morning, the hour ending, or for the period between midnight and 1:00, there were two utilities whose decremental price matched up with Florida Power's offer to sell energy on that evening, correct? Tallahassee, 25 megawatts; and Kissimmee of 16 megawatt, correct?

A That's correct.

Q So you were able to sell 41 megawatts over the broker, and you would agree with me that that energy cleared at a price halfway between 14.47 and either 17.40 or 19.11, correct?

A That's correct.

Q So that those clearing prices, the price at which Florida Power was paid for that energy, was $15 to $16, correct?

A Yes.

Q So the $15 to $16 that you sold that energy for was more than what you calculated your production cost to be for that energy, correct?

A Yes.

Q And that's at the same time you were curtailing the QFs, correct?

A I believe so.

Q So you were making a profit off of your surplus energy sale at the same time that you were curtailing QF energy, right?

A Yes.

Q Now, if you look at the hours of 2:00, 3:00 and 4:00, you would admit that the broker effected no sale for Florida Power during those hours because other utilities were on the broker offering to sell power at a lower price, correct?

A Yes.

Q And you would agree with me that primarily during that period of time FPL was on the market, the wholesale market, selling economy energy or offering to sell energy in the $11 to $12 range, correct?

A Yes.

Q And if Florida Power had priced its energy at $11, would you agree with me that you would have been able to sell all of that power instead of Florida Power and Light?

A Yes.

Q And if you had offered to sell your energy at $11, when Kissimmee and Key West was buying or submitting buy bids at 19, you would agree with me that you could have sold that

energy at a price in excess of your incremental -- of the way you calculate your incremental cost, correct?

A It may have worked out that way.

Q So if you had dropped your price to $11, you still could have sold more megawatts and still made a profit at the time you're curtailing the QFs, right?

A It could have worked out that way.

Q Well, it does work out that way, doesn't it?

A Well, we would be in violation of the broker guidelines in how to price our product. We'd be in violation of the FERC rules.

Q Well, let's talk about the broker guidelines. Who regulates the broker guidelines?

A I don't know if anybody regulates them per se.

Q The fact of the matter is, nobody regulates those guidelines other than the utilities who participate in the Florida broker system, correct?

A I don't believe that's true. It's the rules of the road.

Q There's no regulatory oversight of how you administer the Florida Energy Broker Program, is there?

A At least indirectly there is because everything we sell and buy is -- ultimately winds up in the fuel adjustment and is approved by this Commission.

Q But the price you obtain for selling and buying

power at wholesale is not regulated by this Commission, is it?

A No, it's not.

Q And the rules and regulations that govern how the Florida Energy Broker works is not regulated by this Commission or the FERC is it?

A It's not regulated by them, no, sir.

Q Now let me approach the chart again and make sure I understand what your position is on this subsidy issue that you keep talking about.

CHAIRMAN CLARK: Mr. Presnell, how much more do you have for this witness?

MR. PRESNELL: 15 minutes.

CHAIRMAN CLARK: Okay. Go ahead.

MR. PRESNELL: Does a trap door open if I go 16?

CHAIRMAN CLARK: That's right.

Q (By Mr. Presnell) Let's take the horizontal basis and assume this is a 24-hour period. And on the vertical axis we'll assume that this is -- we'll start at midnight and go a 24-hour day until 11:59 p.m. And on this axis we'll take Florida Power's incremental cost or its as-available pricing in 5 megawatt increments, 5, 10, 15, 20, 25, 30, and I suppose one could go higher.

A I'm sorry, what was that?

Q These are dollars per megawatt-hour of your incremental cost or your as-available rate?

A Okay.

Q Okay? Now, let's assume that under the QF contracts you're paying those QFs a firm price for energy sales and you understand that to be an aspect of the contracts between the QFs and Florida Power that there's an energy rate Florida Power pays for the energy delivered by the QFs to Florida Power.

A You mean do we pay the QFs for the energy they deliver us?

Q Yes, sir, at a firm rate, as opposed to a rate that fluctuates with your as-available pricing.

A I'm not a real expert on how the pricing works out, but it's my understanding that it's not always the same, no. It depends on which contract we're talking about. There are several different contracts.

Q Let's talk about the OCL contract.

A I'm not familiar with the OCL contract.

Q Well, assume with me for a minute that up until August of last year OCL was paid a firm energy rate for all of the delivery it delivered up to its committed capacity to Florida Power at a rate of $20 a megawatt-hour.

Now, as I understand the way your incremental pricing and as-available pricing works, when you're in low load periods, like early in the morning when demand is low, the incremental cost is low, and your as-available price is

low. And as the load picks up and as the demand increases, Economics 101 would dictate that the cost goes up, correct?

A Yes.

Q So because we have been using $15, let me draw a line here during the early morning hours when demand is low, your as-available rate is low, and then during the day it picks up and then gradually drops back off again during the evening hours. Is that a fair representation of the way the as-available works during the course of a day as your demand increases?

A Could be.

Q Now, would you agree with me that in the essence of a firm contract if there are levelized firm energy payments being made to the QF, that as your demand increases during the course of a day and your production costs increase, Florida Power gets the benefit of the period of time during which the as-available rate or your production cost exceeds the firm rate that you're paying the QFs?

A Sure. That's the whole purpose.

Q And so the whole purpose is to get a subsidy from the QFs during those periods of time in which your production cost is higher than the firm rate?

A No, sir, that's why we have such a big capacity payment to the QFs.

Q So you would agree --

A We're buying, in effect, a coal-based unit, so we can't pay more than a coal price.

Q Well, you would agree with me that it's not as simple as determining a difference between the energy cost or the as-available rates in determining whether or not there's a subsidy involved; you have to include things like a capacity commitment, correct?

A It depends on what we're looking at here. We're starting to get a little off kilter, I believe. Are we talking about a subsidy during the minimum load period?

Q Uh-huh.

A No, I believe during a minimum load period that if we're to the point where we have the choice to either curtail the QF suppliers or shut off one of our baseload units, and if we do not curtail the QF suppliers, they will be subsidizing -- the ratepayers will be subsidizing them, that's what I believe during that situation. Now, we can talk about other situations.

Q You're talking about during the situation here there would be a subsidy?

A Yes.

Q And during that period the ratepayers are subsidizing the Southern purchase at $20 a hour, are they not?

A It could be looked at that way, but the difference is of the Southern contract does not have the ability to be

curtailed and the QF contract does.

Q You just signed a settlement agreement with Auburndale, did you not?

A I believe we did.

Q And with Auburndale you agreed to pay them within 10% of the firm rate even if it's above your production cost, correct?

A If you all would like to talk about a settlement agreement, I'm sure we could work on that.

MR. PRESNELL: We would like, Chairman Clark, to introduce into the record the Auburndale agreement. A summary was submitted with the understanding that we would receive a copy of it. We have it and we think it's pertinent that the record include the full agreement, so we would ask that that be submitted into evidence.

MS. WALKER: Chairman Clark, we would object to the admission of that into evidence at this point.

The summary was admitted to update Mr. Dolan's testimony. None of the other curtailment agreements have been admitted into evidence. The settlement agreement is not a subject in this proceeding. It is not relevant. And it is also outside the scope of Mr. Southwick's rebuttal testimony.

MR. PRESNELL: I don't have any objection coming from Florida Power. The document was made public yesterday, it was provided to counsel under the commitment of Florida

Power to make it available. It is clearly relevant to this witness' cross examination, because they just signed an agreement with Auburndale whereby they concede that there's a subsidy. So it's inconsistent and certainly allowable within the scope of cross examination.

CHAIRMAN CLARK: Mr. Presnell, do you have copies of that?

MR. PRESNELL: I have a copy. I will be glad to make copies available. I did not bring copies with me. Copies are available.

CHAIRMAN CLARK: Are you indicating that you would like to introduce that exhibit at this point and continue cross examining Mr. Southwick on it?

MR. PRESNELL: Yes. But I'm not going to ask him specific questions about it, so we don't need to stop the cross examination for that purpose.

CHAIRMAN CLARK: Go ahead with your cross examination, and we'll take up your request to have it introduced into the record later.

Q (By Mr. Presnell) Do you understand, Mr. Southwick, that the agreement that you've reached with Auburndale would require you to pay Auburndale a rate which on occasion would exceed your incremental cost?

A Yes.

Q And to that extent you've just agreed with

Auburndale to subsidize Auburndale at the expense of your ratepayers?

A In exchange for other valuable benefits.

Q What benefits are those?

A I'd have to pull the thing out and read it to get it back in my head. But that's the whole nature of a settlement agreement, you give and you take.

COMMISSIONER DEASON: Let me ask a question.

WITNESS SOUTHWICK: Yes, sir.

COMMISSIONER DEASON: The question to you concerned Auburndale and whether there would be periods of time when the payment to Auburndale exceeded Florida Power's incremental cost; is that correct?

WITNESS SOUTHWICK: That's what I understood him to ask, yes, sir.

COMMISSIONER DEASON: The way I view that graph, there's going to be periods of time when the payments to Orlando CoGen would exceed your incremental cost as well; is that correct?

WITNESS SOUTHWICK: Yes. The way he drew the graph, yes.

COMMISSIONER DEASON: I can't ask Mr. Presnell a question; I'll ask you. What's the significant of that, then?

WITNESS SOUTHWICK: I guess he's getting back to the low load period.

MR. PRESNELL: I'm sorry, maybe my questioning was not clear enough in my haste not to fall through the trap door.

Q (By Mr. Presnell) Mr. Southwick, is it true that you have an arrangement with Auburndale whereby even in low load situations you would agree to pay them a price in excess of your as-available rate; not when they are curtailed but during low load situations?

A During low load situations other than during the curtailment period. And I believe as part of that settlement they are not going to contest the curtailment situation, so they won't get paid during that.

Q Well, they won't get paid during the period of time that they're not delivering energy?

A Right.

Q But during the periods of time that they are delivering energy they will be paid at a rate which approaches their firm rate, or is equal to their firm rate, even when that rate exceeds Florida Power's incremental?

A There will be times when they will be paid more than incremental cost.

COMMISSIONER DEASON: Will there be times when Orlando CoGen will be paid a rate that exceeds Florida Power's incremental cost during a low load situation?

WITNESS SOUTHWICK: Not under the current billing

practices, as I understand them. I'm not an expert on pricing of the cogeneration.

COMMISSIONER DEASON: Okay. Well, then, is that graph incorrect? I would assume --

WITNESS SOUTHWICK: He assumes --

COMMISSIONER DEASON: Let me ask my question, please.

WITNESS SOUTHWICK: I'm sorry, yes, sir.

COMMISSIONER DEASON: Okay. Thank you.

I had to use my hand. I don't have a gavel anymore.

That graph says to me that OCL is going to be paid $20 per megawatt-hour regardless of the time of day. Is that the way you interpret that graph?

WITNESS SOUTHWICK: Yes, sir. I interpreted that he said, "We'll assume that they are paid $20 all the time." And given that assumption that's the way I interpreted it, yes, sir.

COMMISSIONER DEASON: Okay. But you're saying in the real world, though, they are not paid $20 a megawatt-hour 24 hours a day.

WITNESS SOUTHWICK: I don't believe they are.

COMMISSIONER DEASON: You don't know?

WITNESS SOUTHWICK: I don't believe they are, but -- I don't believe they are.

COMMISSIONER DEASON: Okay. Thank you.

MR. PRESNELL: Commissioner Deason, an explanation for that is, and I premise my question, up until August that's the way we were paid. That's when they changed the pricing. That's what is involved in a lot of the litigation that's going on and we're not trying to make that a part of this proceeding because you denied jurisdiction over that, and I think properly so. But that's just an explanation of why I used the example up until August of 1994 in my question.

COMMISSIONER DEASON: Okay. Thank you.

MR. PRESNELL: That's all the questions I have. Thank you for you patience.

CHAIRMAN CLARK: Thank you, Mr. Presnell.

We're going to take break until 1:00.

Mr. Watson, do you have some questions?

MR. WATSON: No.

CHAIRMAN CLARK: Mr. Wright?

MR. WRIGHT: Madam Chairman, my questioning of Mr. Southwick is very brief, I promise.

CHAIRMAN CLARK: We'll do it after lunch at 1:00.

MR. WRIGHT: Okay.

MS. BROWN: We just have one.

CHAIRMAN CLARK: All right. Thank you.

(Thereupon, lunch recess was taken at 12:10 p.m. until 1:00 p.m.)

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CHAIRMAN CLARK: We'll reconvene the hearing.

Mr. Wright.

MR. WRIGHT: Thank you, Madam Chairman.

HENRY I. SOUTHWICK

resumed the stand as a witness on behalf of Florida Power Corporation and, having been previously sworn, testified as follows:

CROSS EXAMINATION

BY MR. WRIGHT:

Q Good afternoon, Mr. Southwick. As advertised, I have a few brief questions for you.

In your responses to cross examination by Mr. Presnell you stated that it's your belief that the Federal Energy Regulatory Commission regulations prohibit Florida Power from charging less than its incremental cost; is that correct?

A That's correct.

Q Can you tell me to what FERC regulations you're referring?

A No, I can't.

Q To your knowledge, are there any FERC regulations that prescribe the calculation of incremental cost?

A I'm not personally familiar with the regulations. I've never read any, but I base my opinion on the advice I have been given by my attorney.

Q Thank you. Are you familiar with Florida Power Corporation's FERC-approved tariffs for wholesale power transactions?

A Somewhat.

Q Do you know whether they say that Florida Power will price such sales at incremental cost or whether they prescribe a formula by which those incremental costs will be calculated?

A I'd have to look and see if they say that or not. I don't believe there's a formula in them, but I don't know what they say in that respect. I would have to go look and see.

Q Okay. I'll just ask the first half of my question. Do you know whether they just say that you will price at incremental cost? If your answer is, "I don't know," then --

A I don't know.

Q Okay. Also in response to some questioning by Mr. Presnell you indicated that if you were to -- I think in the example he used, or that you and he were discussing, that if you had priced during a certain event at $11 a megawatt-hour on the broker that you, that is Florida Power Corporation, would have been in violation of broker guidelines. Do you recall that conversation?

A Yes.

Q My question is what would happen if you violated the broker guidelines?

A Well, there's two or three things that I have a

problem with that situation.

Number one, we can't quote a price below our incremental. I think that would be a violation of the FERC rules. If we did, and in that example that we looked at earlier, the average, after the 50/50 split worked out to be above incremental, and you say, "Well, that would be okay." But you didn't know going in that that was going to be the result. You'd be gaveling that you'd luck out and not be in violation of the FERC rules, and maybe you wouldn't luck out and we wouldn't take that chance.

But beyond that in a more generic sense, if we started gaming the broker, the broker is going to fall apart. It's a contract that we all have that we'll follow these rules of the road, and if everybody follows it, the system works beautifully and the ratepayers save an awful lot of money. And if we start gaming it and if everybody else starts gaming it, it's going to fall apart, and we'll lose the advantage of the program.

Q Do you mean to suggest that the QFs in this case are advocating that you "game the broker"?

A No, I didn't say that.

Q I didn't think so; I wanted to make sure, however, because you did use that phrase.

You made reference in your last response to a contract that you have. What would the sanctions be if you

were to offer a price to sell on the broker at less than what you understand to be required by the broker guidelines?

A Well, the broker guidelines simply re-enforce the FERC rule, that we can't quote below incremental cost. I don't know of any sanctions in the broker guideline rules. It's rules of the road that we've all agreed to follow, through our participation in the broker. I would think that the real sanction, if you want to think of it as why we have to do it, is because of the FERC guidelines.

Q Okay. Just assume for the purpose of the next question that the FERC rules don't require you to price in any particular way. Would there be sanctions if you were to price below what you say your incremental cost is from your broker or the members of the Florida Electric Power Coordinating Group?

A No, there's no sanctions in the broker itself.

Q Thank you. That's all I have.

CHAIRMAN CLARK: Thank you, Mr. Wright.

Staff?

CROSS EXAMINATION

BY MS. BROWN:

Q Mr. Southwick, Mr. Presnell asked you at least one question about the firm nature of your QF contracts. Do you remember that?

A Yes.

Q And yesterday Mr. Shanker spoke frequently of Florida Power Corporation's obligation to honor its contractural commitments to QFs. Do you remember that?

A Yes.

Q Would you agree with me that Florida Power Corporation has another fundamental obligation that it must honor at all times, at peak periods and low load periods, and that is the obligation to provide reliable cost-effective electric service to its ratepayers?

A Yes.

MS. BROWN: No further questions.

CHAIRMAN CLARK: Thank you.

Commissioners? Redirect?

MR. McGEE: Just one, Madam Chairman.

REDIRECT EXAMINATION

BY MR. McGEE:

Q Mr. Southwick, you were asked several questions, I believe, by Mr. Presnell and Mr. Wright regarding the arrangements under which Florida Power makes sales on the broker. What I wanted to ask you is that once the broker makes a match between a buyer and a seller, how is that transaction actually carried out?

A The transaction is actually carried out through the terms of the interchange contracts between the buyer and the seller.

Q And are those interchange contracts on file with FERC?

A Yes. They are all FERC-approved contracts.

MR. McGEE: That's all I have.

CHAIRMAN CLARK: Thank you, Mr. McGee.

MR. McGEE: We'd ask that -- you may have to help me again -- Composite Exhibit 17, I believe, be admitted into the record, if that's the correct number.

CHAIRMAN CLARK: That's correct. Exhibit 17.

MR. McGEE: Thank you.

CHAIRMAN CLARK: Be admitted in the record without objection.

(Exhibit No. 17 received in evidence.)

MR. PRESNELL: And we would move the admission of the settlement agreement, the Auburndale, which I have copies of now.

CHAIRMAN CLARK: Okay.

MR. FAMA: Chairman Clark Florida Power objects to the admission of the Auburndale agreement.

MS. WALKER: Auburndale also renews its objection.

MR. FAMA: Commissioner Clark, if I could address that.

CHAIRMAN CLARK: Yes, if you'll give me a chance to get the agreement. (Hands document to Commissioners.)

Thank you. It will be marked as Exhibit 18.

Go ahead, Mr. Fama.

MR. FAMA: Thank you.

Mr. Dolan offered a summary of the curtailment provisions in that settlement agreement when he sponsored his direct testimony. His direct testimony originally had in it a summary of settlement -- excuse me, of curtailment procedures that were no longer accurate, because there were new curtailment procedures in the new settlement.

At that time I told the Commission I had the full copy of the settlement agreement, because I thought that a party might object to our summary and want to check the veracity and the accuracy of what was in the settlement. Not because I intended to introduce the document. I did not offer it in any way; I didn't have Mr. Dolan sponsor it or anything of the short. So when our summary went into evidence, and there hasn't been any objection to the accuracy of our summary, I thought it was a dead issue up until now.

It was well beyond the scope of Mr. Southwick's rebuttal testimony. He didn't attach it. He's not a sponsoring witness. I think Mr. Presnell is missing a crucial element of trying to get a piece of evidence into the record. He doesn't have anybody to sponsor it. I don't believe Mr. Southwick is an expert on that. I know he reviewed some earlier drafts, and I would invite the Commission or Mr. Presnell, or I can ask questions about Mr. Southwick's

knowledge, but I don't think he has enough expertise to sponsor the document.

As far as Mr. Presnell's cross examination, if you treat it as a hypothetical, then it's okay. But I don't think his cross examination alone is enough to get in that piece of evidence. And so, therefore, I'd urge you to keep it out.

CHAIRMAN CLARK: Ms. Walker.

MS. WALKER: The settlement agreement should not be admitted into evidence for several reasons. In addition to those just mentioned by Mr. Fama, it is clearly beyond the scope of Mr. Southwick's rebuttal testimony. Mr. Southwick nowhere in is rebuttal testimony mentions the settlement agreement with Auburndale. In fact, he could not have because his rebuttal testimony was submitted on May 2nd, and the agreement wasn't executed until May 3rd.

Also, we agree with Mr. Fama that Mr. Presnell has missed the boat. Mr. Dolan would have been the appropriate witness that possibly could have sponsored the settlement agreement. Mr. Presnell had the opportunity to cross examine Mr. Dolan at that time; that was not done. Mr. Southwick cannot support this document.

It is also not relevant to the issue before the Commission in this proceeding to the extent that the curtailment provisions or agreements that APP has reached with FPC are relevant. Those have been submitted with Mr. Dolan's

testimony and his augmented summary. The other terms of the settlement agreement are not relevant to what is before the Commission in this proceeding, and it would not be appropriate for it to be admitted at this time.

MS. BROWN: Madam Chairman, could I just make one mention, just by way of information?

CHAIRMAN CLARK: Okay.

MS. BROWN: Not to take a position on the ultimate decision you have to make.

I just wanted you to be aware that this agreement has not been submitted to the Commission for approval yet, and it is probably in the nature of a modification to their contract that would have to come to us for approval. I just wanted to let you know the status of it.

CHAIRMAN CLARK: Mr. Presnell?

MR. PRESNELL: Chairman Clark, Commissioners, let me respond in reverse order. Yes, it's our understanding this will be filed with the Commission shortly in support of a petition and the Commission will consider it in that context.

With respect to counsel for Auburndale's comments, I submit that Auburndale has no standing to object. This document has been made available. This is a dispute on this issue between Florida Power and Orlando and Pasco. Auburndale has taken no position on the issue and, therefore, has no standing to object whatsoever.

With respect to the objections raised by Mr. Fama, there are two essential elements with respect to the admissibility of a document. The first is whether it is authentic. There's no question but that this is an authentic document.

Second the question is whether it is relevant. There's no rule of evidence that says someone has to sponsor the document.

The real issue and the only issue, I submit, is whether it is relevant. It is relevant in part because Mr. Dolan made it relevant when he mentioned in his testimony and discussed during his testimony the Auburndale curtailment agreement.

So Florida Power is the one who put in play the relevancy of the Auburndale agreement. They cannot do so, submit a summary and then object to the relevancy of the very exhibit which they contend is relevant in the first place.

With respect to that issue, one of the key elements of Florida Power's position, as I understand it, is that they object to pricing energy on a basis that would, according to their calculation, cause a subsidy to the ratepayers or cause the ratepayers harm in some sort of subsidy.

This agreement shows that Florida Power last week just entered into an agreement by which they have agreed to do just that. And so it is certainly from a impeachment

standpoint relevant. It's relevant in support of Mr. Dolan's own testimony when he put the issue at play during his direct testimony. It is clearly relevant. It is obviously authentic and it is certainly admissible.

CHAIRMAN CLARK: I'm going to allow the exhibit into the record as Exhibit 18.

(Exhibit No. 18 marked for identification and received in evidence.)

CHAIRMAN CLARK: Anything further?

MS. BROWN: That's our last witness?

CHAIRMAN CLARK: I believe so.

MS. BROWN: Oh. Well, let me get the CSAR.

CHAIRMAN CLARK: Did we catch you by surprise?

MS. BROWN: Well, we've just been going on for so long.

CHAIRMAN CLARK: Let me ask this: Is there anything else that we need to take up before we adjourn today?

MR. McGLOTHLIN: One quick matter, during the prehearing conference I requested that you allow parties 75 words per issue in the posthearing positions, rather than the usual 50. You said you would reserve ruling on that.

CHAIRMAN CLARK: Uh-huh.

MS. BROWN: Chairman Clark, we're talking about summary of positions to each of the issues?

CHAIRMAN CLARK: Yes, and I unders*and it has to be

MS. BROWN: I really don't have all that much of an opinion on it, though I do think that 50 words is plenty to state the parties positions. If you can't say it in 50 words -- what did you say?

CHAIRMAN CLARK: Commissioner Garcia has just pointed out that you do have a opinion.

MR. McGLOTHLIN: I make the request from the standpoint of one who has counted sentences and compared words and left out prepositions many times to get within the 50.

MS. BROWN: I'm sorry, I didn't hear that because I had not quite finished what I wanted to say.

If you can't say it in 50 words, it probably is not worth saying.

That being said, though, if you want to read 75 words, go ahead.

CHAIRMAN CLARK: Anything else? Anything else? Is that the only thing we have to decide?

MS. BROWN: No, there is one other thing. And then I need to read the CSAR.

The other thing is that in the Prehearing Order in other matters, Orlando CoGen specifically requested that the Commission vote on each of the subissues identified in the Prehearing Order, particularly, I think, it's Issue 2 and Issue 6.

MR. McGLOTHLIN: The mitigation issues and the time

frame and nature of cost in the avoided cost comparison. I don't recall the number of the issues, but they are set out there.

MS. BROWN: As you said in the prehearing conference, Chairman Clark, that's well within the sound discretion of the Commission to decide whether they want to do that or not. I recommend that it's not necessary.

CHAIRMAN CLARK: I think it's premature at this point to make a decision on that. It seems to me when a Staff makes a recommendation on this with regard to the matters in this docket, and the Commission considers it, then the Commission can decide whether they feel that they are compelled to vote on each of the issues.

Commissioners, there were some issues or points raised by the parties that I felt were subissues of a larger issue, and it became apparent that the reason -- one of the reasons they were being identified as an issue was a desire on the part of some parties to have Commission vote policy on some of these items.

I view that as something within our discretion to do or not do as we find it necessary in a particular case. And I pointed out to the parties that they have the option of using findings of fact or conclusions of law if they feel that there's a particular point on which we should rule one way or the other. I still think that can be done at the time we

decide to take a vote. I mean we'll have all the matters before us, and we will each have the opportunity to review the record and the recommendation and decide what is necessary and appropriate for us to draw conclusions on and make decisions on.

MS. BROWN: Chairman Clark, the transcripts from this proceeding are due May 23rd. The parties briefs are due June 15th. Our recommendation will be filed the 6th of July, for your consideration at your regular agenda the 18th of July, standard order to be issued the 7th of August.

CHAIRMAN CLARK: Mr. McGlothlin, with respect to your request of more than 50 words, I think the Commission has adopted a rule calling for 50 words except where there is just cause, and I don't find that the issues in this case or the explanation of positions on this issue would require more than 50 words. I think if this does, then everything does, and for that reason I would not allow more than 50 words. I would follow the rule in this case.

MR. McGLOTHLIN: All right.

MS. BROWN: There's nothing further that I'm aware of.

CHAIRMAN CLARK: Thank you very much. This hearing is adjourned.

(Thereupon, the hearing concluded at 1:25 p.m.)

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STATE OF FLORIDA)
:
COUNTY OF LEON )

CERTIFICATE OF REPORTERS

We, JOY KELLY, CSR, RPR, Chief, Bureau of Reporting, SYDNEY C. SILVA, CSR, RPR, and ROWENA NASH HACKNEY, Official Commission Reporters,

DO HEREBY CERTIFY that the Hearing Docket No. 941101-EQ was heard by the Florida Public Service Commission at the time and place herein stated; it is further

CERTIFIED that we stenographically reported the said proceedings; that the same has been transcribed under our direct supervision; and that this transcript, consisting of 1,026 pages, Volumes 1 through 7, constitutes a true transcription of our notes of said proceedings.

DATED this 23rd day of May, 1995.

JOY KELLY, CSR, RPR
Chief, Bureau of Reporting,

SYDNEY C. SILVA, CSR, RPR

ROWENA NASH HACKNEY

STATE OF FLORIDA)
:
COUNTY OF LEON )

The foregoing certificate was acknowledged before me this 23rd day of May, 1995, by JOY KELLY, SYDNEY C. SILVA and ROWENA NASH HACKNEY, who are personally known to me.

PATRICIA A. CHURCH
Notary Public - State of Florida

PATRICIA A. CHURCH MY COMMISSION EXPIRES APRIL 20, 1999 #CC 438451 NOTARY PUBLIC, STATE OF FLORIDA