

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Hearings on Load Forecasts,)	DOCKET NO. 890004-EU
Generation Expansion Plans, and)	
Cogeneration Prices for Peninsular)	ORDER NO. 20845
Florida's Electric Utilities.)	
_____)	ISSUED: 3/3/89

Pursuant to Notice a Prehearing Conference was held on February 20, 1989, in Tallahassee, Florida, before Commissioner Gerald L. Gunter.

APPEARANCES:

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On behalf of Orlando Utilities Commission (OUC), City of Lakeland (LAKELAND), City of Jacksonville (JEA) and City of Tallahassee (TALLAH).

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PREHEARING ORDER

Background

Pursuant to Section 366.04(3), Florida Statutes, the Commission has jurisdiction over the "planning, development, and maintenance of a coordinated electrical power grid throughout Florida to assure an adequate and reliable source of energy for operational and emergency purposes in Florida and the avoidance of further uneconomic duplication of generation, transmission, and distribution facilities ..."

In order to fulfill these responsibilities, the Commission has instituted this docket for the purposes of:

- (1) Adopting 20-year optimal statewide generation expansion planning studies for Northwest Florida
- (2) Reviewing the individual 20-year optimal generation expansion planning studies of Florida Power Corporation, Florida Power & Light Company, Gainesville Regional Utilities, Jacksonville Electric Authority, the City of Lakeland, Orlando Utilities Commission, the Seminole Electric Cooperative, Inc., the City of Tallahassee, and Tampa Electric Company;
- (3) Understanding the relationship between the peninsular Florida 20-year optimal generation expansion planning studies to the individual 20-year optimal generation expansion studies of the utilities listed above; and
- (4) Based on peninsular Florida's 20-year optimal statewide generation expansion planning studies, to set the prices at which investor-owned utilities must purchase energy and capacity produced by qualifying cogeneration and small power production facilities.

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The peninsular Florida generation expansion planning studies referred to above have three parts: a Forecast Document, Generation Expansion Planning Document and 20-year plan. Pursuant to Order No. 18804, issued on February 4, 1988, this Commission approved the work plan which the Florida Electric Power Coordinating Group (FCG) had filed on behalf of the peninsular utilities for the completion of these studies.

The peninsular Florida utilities timely filed the Forecast Document on June 29, 1988; the Generating Expansion Study on September 1, 1988; and the Aggregate 20-Year Plan on September 15, 1988. On December 8, 1988, FCG, FPC, FPL, TECO, Dade, filed direct testimony. Staff filed direct testimony on December 9, 1988, and supplemental direct testimony on January 27, 1989. JEA filed direct testimony on December 13, 1988. FGT filed direct testimony on January 6, 1989. SEC filed direct testimony on January 13, 1989. Rebuttal testimony of Richard A. Basford (FCG) and Frank Seidman (FICA) was filed on January 13, 1989. On January 27, 1989, FICA, FCG, TECO, FPC, FPL, FGT, Dade County, SEC, City of Tallahassee, Orlando Utilities Commission, City of Lakeland, and Staff filed prehearing statements. On February 20, 1989, Dade filed an Amended Prehearing Statement, and on February 24, a Supplement to Amended Prehearing Statement. Hearings will be conducted on March 6, 8-10, 1989, in Tallahassee.

On February 17, 1989, AES Cedar Bay, Inc. (AES) filed a petition for intervention in this docket. AES has stated that it has a substantial interest based on the language in Order No. 20671, issued on January 30, 1989. In Order No. 20671, Prehearing Officer Wislon denied Staff's motion to implead FPL in AES's need determination application docket but requested that all parties to that docket be prepared to discuss the use of planning hearing findings in need determination application dockets. For that reason, we grant AES' petition for intervention.

AES has not, however, filed a prehearing statement nor has it attended the prehearing conference. Pursuant to Rule 25-22.038, Florida Administrative Code, any party who does not attend the prehearing conference, unless excused by the Prehearing Officer, has waived his right to raise issues or take positions on any issues raised by other parties to the docket. A party who does not attend the prehearing conference has also waived his right to file post-hearing briefs. Thus the only right retained by AES is the ability to conduct cross examination at the hearing should AES choose to attend.

Use of Prefiled Testimony

All testimony which has been prefiled in this case will be inserted into the record as though read after the witness has taken the stand and affirmed the correctness of the testimony and exhibits, unless there is a sustainable objection. All testimony remains subject to appropriate objections. Each witness will have the opportunity to orally summarize his testimony at the time he or she takes the stand.

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Use of Depositions and Interrogatories

If any party desires to use any portion of a deposition or an interrogatory, at the time the party seeks to introduce that deposition or a portion thereof, the request will be subject to proper objections and the appropriate evidentiary rules will govern. The parties will be free to utilize any exhibits requested at the time of the depositions subject to the same conditions.

Order of Witnesses

In keeping with Commission practice, witnesses will be grouped by the subject matter of their testimony. The witness schedule is set forth below in order of appearance by the witness's name, subject matter, and the issues which will be covered by his or her testimony.

<u>Witness</u>	<u>Subject matter</u>	<u>Issues</u>
<u>Direct Testimony</u>		
R. A. Basford	FCG study overview and general policy issues	6, 7, 8, 9, 11, 13, 14, 16, 23, 33, 33, 37
M. F. Jacob	FCG load forecast issues	1, 2
G. L. Gillette	FCG generation planning studies	3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 16, 21, 23, 31, 32, 33
M. F. Jacob	FPC demand and energy forecast	1, 2
J. J. Murphy	FPC generation expansion planning studies	1
W. H. Smith	FPL's generation expansion planning documents	1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 32, 33, 34, 35
J. C. Evelyn	FPL's load forecast document	2
D. Corn	FPL's avoided costs	12, 16, 17, 18, 19, 20, 22, 25, 26, 27, 28, 29, 33, 34, 35

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<u>Witness</u>	<u>Subject matter</u>	<u>Issues</u>
<u>Direct Testimony</u>		
J. B. Ramil	TECO's generation expansion planning document	3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35
T. W. Moore	TECO's forecast document	
G. D. Tipps	SEC's expansion planning documents; power supply study	
P. G. Para	JEA's generation planning studies	
S. C. Horton	Gas availability - FGT	
L. A. Dellapa	Avoided cost policy - Dade	2, 6, 9, 11, 12, 14, 15, 18, 22, 23
T. Ballinger	Planning studies and allocation - Staff	12, 14, 16, 17, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35
<u>Rebuttal Testimony</u>		
F. Seidman	FCG's generation expansion planning studies; avoided unit - FICA	1, 2, 3, 4, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 28, 29, 30, 31, 32, 33, 34, 35, 38
R. A. Basford	Subscription limits - FCG	16

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EXHIBITS

<u>Exhibit Number</u>	<u>Witness</u>	<u>Description</u>
101	Jacob	Planning Hearing Forecast Document
102	Gillette	1989 Planning Hearing Generation Planning Studies
103	Gillette	1989 Planning Hearing 20-Year Plan
104	Gillette	(GLG-1)-Comparison of long-range planning study and avoided unit study; comparison of long-range planning study and aggregate individual utility plans
105	Gillette	(GLG-2)-Summary of corrections to FCG's generation expansion planning studies document, including corrected pages
201	Jacob	FPC forecast document
202	Murphy	FPC generation expansion planning studies document
301	Smith	Document No. 1 - FPL's generation expansion planning document
302	Evelyn	FPL's forecast document: Exhibit 302

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<u>Exhibit Number</u>	<u>Witness</u>	<u>Description</u>
402	Moore	(TWM-1) - History and forecast of winter peak demand, summer peak demand and net energy for load
403	Moore	TECO Forecast Document
501	Tipps	SEC's individual utility expansion planning document
601	Para	JEA's expansion planning document
701	Dellapa	Vita
801	Ballinger	(TEB-1) - Cogeneration Need Determination Orders
802	Ballinger	(TEB-2) - Summary of Fuel Price Data
803	Ballinger	(TEB-3) - Avoided Unit Sensitivity Results
804	Gillette	Responses to Staff's First Set of Interrogatories to FCG Nos. 1, 8, 9, 10, 11, 13 .
805	Gillette	Responses to Staff's Second Set of Interrogatories to FCG Nos. 18, 19
806	Gillette	Responses to Staff's Third Set of Interrogatories to FCG Nos. 21-23.
807	Gillette	Responses to Staff Interrogatories Nos. 24-7
901	Seidman	(FS-1) - Effects of out-of-state purchases on need for capacity

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<u>Exhibit Number</u>	<u>Witness</u>	<u>Description</u>
902	Seidman	(FS-2)-Comparison of peak forecasts in 1986 and 1989 APH avoided unit studies
903	Seidman	(FS-3) Capacity payment levels assuming FCG cost parameters and payments beginning in 1989
1000	Stipulated	City of Orlando's, Tallahassee's and Lakeland's, Individual Studies

BASIC POSITIONS OF THE PARTIES

STAFF: The avoided unit study and long-range planning study prepared by the Florida Electric Power Coordinating Group (FCG) are reasonable and can be considered appropriate for peninsular Florida at this time. The three combined cycle units of 220 MW each with an in-service date of 1992 as identified in the FCG's avoided unit study should be designated as the avoided units for the purposes of calculating cogeneration payments in peninsular Florida. Should enough cogeneration be subscribed to avoid the 1992 combined cycle units, cogeneration payments should be based on the set of five 1993 220 MW combined cycle units designated in the FCG's avoided unit study. If enough cogeneration is subscribed to defer the 1992 and 1993 combined cycle units, cogeneration payments should be based on two 1994 220 combined cycle units.

In order to comply with the requirements of Rule 25-17.083(3)(a), Florida Administrative Code, the availability of a standard offer contract based on the 1992 units should terminate on January 1, 1990. Subsequent to that date, the 1993 units identified in the avoided unit study should be made available for subscription.

For the 1992 avoided units, firm energy payments should be based on the lesser of delivered oil and natural gas fuel prices associated with the Florida Power and Light Company's (FPL) Putnam plant times the heat rate of the avoided unit and they also should include variable O & M costs. The capacity factor at which the cogenerator is required to supply firm energy should be consistent with the type of unit upon which the standard offer is based. Standard tariffs which incorporate these standard offers should be filed by investor-owned utilities.

In order for least-cost expansion plans to be operable, investor-owned, municipal and rural electric cooperative utilities must participate in and follow such plans. Unless all electric utilities in the State of Florida share in the implementation of least-cost generation planning, the 1992

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avoided unit will not be deferred, as currently projected. In the past, the Commission has used the Planning Hearing findings as a surrogate for certain factual findings required by the Florida Power Plant Siting Act, Sections 403.501-.517, Florida Statutes. In order for these findings to be accurate, the use of a statewide avoided unit must be accompanied by an allocation of capacity among all the state's electric utilities. The allocated capacity as calculated by Staff is as follows: 40% to FPL, 19% to Florida Power Corporation (FPC), 8% to Tampa Electric Company (TECO), and 33% to the municipals and rural electric cooperatives. For the 1992 avoided units, this allocation results in subscription limits of 264 MW for FPL, 125 MW for FPC and 53 MW for TECO.

FCG: FCG's basic position is that the FCG studies satisfy the Commission's order and the Work Plan in this docket. The studies provide the Commission with a good source of information on the generating needs in Peninsular Florida, and on a method of satisfying those needs that takes into account the numerous financial and nonfinancial considerations that go into any utility decision to add new capacity. They also provide the Commission with the requested information about the statewide avoided unit, which is a 220 MW combined cycle unit in 1992.

FPC: FPC's Demand and Energy Forecast and its Generation Expansion Planning Studies satisfy the requirements established by the Commission for this proceeding. The planning studies filed by FCG are reasonable and adequate for the purposes of this proceeding. The FCG Studies demonstrate that a 220 MW combined cycle unit in 1992 should be designated as the statewide avoided unit for the calculation of capacity and energy payments to QFs under FPC's standard offer contract. The capacity factor at which a QF must operate to qualify for firm energy and capacity under the standard offer contract should be based on the capacity factor of the avoided unit, both on average and during peak periods.

FPC's position on the designation of a statewide avoided unit stated above and on various issues below is based on a recognition that the methodology for determining payments to QFs in this proceeding must comport with the Commission's Cogeneration Rules (Sections 25-17.080 through 25-17.091, Florida Administrative Code), and with the concept of a hypothetical statewide avoided unit embodied therein. Accordingly, FPC's support of the particular statewide avoided unit identified by the FCG Studies does not imply an endorsement of the underlying "statewide" concept. To the contrary, FPC firmly believes that both the price and the amount of a utility's capacity purchases from QFs should be based on the costs, operating characteristics, and capacity of the unit avoided by that utility. FPC therefore supports revisiting the Cogeneration Rules as the most effective means to rectify the inadequacies of the Rules, which have been recognized in the testimony of both Staff and utility witnesses in this proceeding.

FPL: FPL has developed a twenty year power supply expansion study which appropriately considers the cost effectiveness, the Fuel Use Act, the FEECA goals, financing and siting

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considerations, fuel diversity and other relevant factors. The resulting plan, when used in conjunction with the other individual plans submitted by the other utilities in this proceeding, is suitable for planning purposes and for use in determining the pricing of qualifying facility (QF) capacity and energy.

Consistent with Rule 25-17.083, Florida Administrative Code, the designation of the statewide avoided unit to be used for calculating QF prices should be based on the individual utility filings rather than the FCG Statewide Study. Based upon the individual utility filings, the avoided unit should be a combined cycle unit in 1992.

As a practical matter, FPL is pressing for the use of individual utilities' filings because it believes that will facilitate the determination of the utility with the statewide avoided unit. Designating which utility has the statewide avoided unit is essential to the Commission's goal of having other utilities market their purchase of QF power to the utility with the need for capacity. Although the Commission could make such a designation while using a statewide plan, use of costs associated with the statewide plan could significantly deviate from the costs developed in the individual utility's plan, thereby increasing potential marketing problems.

TECO: Tampa Electric concurs with the conclusions reached by the FCG studies.

Tampa Electric's Base Case Study shows that the company's system will require 75 MW of peaking capacity additions each year from 1993 through 1997 to maintain system reliability. Combustion turbine capacity is the most economic generation alternative to meet these requirements, coupled with a 70 MW heat recovery steam generator in 1998 to be interconnected with the 1996 and 1997 combustion turbines to form a combined cycle unit. Tampa Electric's studies further indicate that the company's avoided unit would be a 1993 combustion turbine.

SEC: The SEC Individual Utility Filings satisfy the Commission's Order Numbers 18804 and 19427 entered in this docket. SEC's positions on factual, legal and policy issues are identical to those taken by the FCG in this Prehearing Statement, due to SEC's participation within that group. SEC has no additional issues or positions.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: FICA's basic position in this proceeding is: 1) that the generation expansion planning studies provided by the Florida utilities and the FCG fail to provide the Commission with sufficient information for it to determine standard offer capacity payments for QFs; 2) that the demand forecasts used in the avoided unit studies appear to understate demand by the amount of the uncommitted conservation and a certain amount of nonfirm self-service cogeneration; 3) that the capacity forecasts used in the avoided unit study overstate Florida utility capacity by the amount of out-of-state purchases and,

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apparently, by the amount of QF capacity associated with nonfirm energy and capacity; 4) that the avoided unit studies understate the need for and timing of an avoided unit by failing to consider all alternatives to Florida generation on an equal basis; and 5) that the avoided unit designated for purposes of setting the standard offer rate should be a coal unit with an in-service date of 1989.

FGT: FGT's basic position as set forth in the testimony of Mr. Horton is that gas-fired combined cycle electric generation is the most cost-effective and appropriate technology for meeting the future electric generation needs of peninsular Florida.

DADE: The Public Service Commission should establish four policy guidelines as a basis for determining when new utility generation and/or transmission capacity needs to be built in Florida, and the type and cost of utility generation and/or transmission capacity that might be avoided by encouraging ratepayers to invest in conservation, non-firm rates and self-generation from waste energy, cogeneration, and solar power. These policy guidelines include the following:

1. The Commission should evaluate all investment alternatives which "avoid new utility capacity purchases or additions" on an equal basis. These alternatives are conservation, load management and interruptible service goals, power purchase contracts since 1985 from Southern Companies, power generation from qualifying facilities and new utility generation and transmission investment options.
2. The Commission should establish a consistent methodology for evaluating the "cost effectiveness" of all programs that they approve that compete with the addition of utility generation and transmission capacity.
3. The Commission should insure that the evaluation criteria for comparing alternatives to utility capacity additions include, at a minimum cost, reliability, primary fuel efficiency and Florida's balance of payments.
4. The Commission should ensure that there are equal opportunities for all classes of ratepayers to participate in incentive programs that avoid the addition of utility capacity.

Using the policy guidelines recommended above to determine "full avoided cost", the Commission would only consider those utility generation and transmission facilities included in the last Annual Planning Hearing as available to serve capacity and reliability demand. This would, at a minimum, require new capacity contracts from Southern Companies, newly approved transmission additions, conservation, non-firm tariffs, etc., to compete equally with waste energy, solar, cogeneration, etc.

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FACTUAL ISSUES

LOAD FORECASTS

ISSUE 1: Are the forecasts of energy and seasonal peak demand as presented in the FCG's Forecast Document reasonably adequate for planning purposes?

POSITIONS

STAFF: Yes.

FCG: Yes. The aggregation of individual utility forecasts, coupled with a comprehensive review by experienced utility forecasters, produced a high quality forecast for Peninsular Florida that is appropriate for planning purposes. (Jacob)

FPC: Agree with FCG.

FPL: Yes. (Smith)

TECO: Agree with FCG. (Moore)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKELAND: Agree with FCG.

FICA: No. To the extent that the energy and demand forecasts include reductions associated with uncommitted conservation and load management, they are not proper for use in the Avoided Unit Study. (Seidman)

FGT: No position.

DADE: No position.

ISSUE 2: Are trends in conservation and cogeneration adequately considered in the FCG's peninsular Florida load and energy forecasts?

POSITIONS

STAFF: Yes.

FCG: Yes. The forecasts include the aggregate of each utility's best estimate of conservation and cogeneration. The utilities predict that the conservation reflected in the base case forecast will occur whether or not there are additional QFs. Thus it is appropriate to reflect those programs both in the long-range planning study and in the avoided unit study. (Jacob)

FPC: Agree with FCG.

FPL: Yes. (Smith, Evelyn)

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TECO: Agree with FCG. (Moore)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: No. To the extent that the energy and demand forecasts include reductions associated with uncommitted conservation and load management, they are not proper for use in the Avoided Unit Study. To the extent that as-available energy is considered as having capacity value, they are not proper for use in the Avoided Unit Study. (Seidman)

FGT: No position.

DADE: No. The forecasts discount the timing for need of new capacity by unmet conservation goals and new, optional, out-of-state purchases. (Dellapa)

FUEL FORECASTS

ISSUE 3: Have uncertainties in fuel price forecasts been appropriately considered?

POSITIONS

STAFF: Yes.

FCG: Yes. High-band and low-band forecasts were prepared for all fuels based on a scenario approach to fuel price forecasting. (Gillette)

FPC: Agree with FCG.

FPL: Yes. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: Yes, but only for purposes of developing the information-source objective of the Planning Hearing. However, for purposes of meeting the rate-setting objective, the strategic uncertainties should be given additional weight. (Seidman)

FGT: Yes, agree with FCG.

DADE: No position.

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GENERATING TECHNOLOGIES

ISSUE 4: Is the treatment of generating technologies as presented in the FCG's Generation Expansion Planning Studies document reasonably adequate for planning purposes?

POSITIONS

STAFF: Yes.

FCG: Yes. FCG screened a total of 75 generating technologies in arriving at the three technologies ultimately selected for detailed study. (Gillette)

FPC: Agree with FCG.

FPL: Agree with FCG. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKELAND: Agree with FCG.

FICA: As to the combustion turbine based technologies, FICA questions the technical and economic viability of coal-gasification in providing "fuel flexibility." FICA notes that nuclear plants did not clear the screening process based on expectations of regulatory impediments. (Seidman)

FGT: Yes, agree with FCG.

DADE: No. Dade County adopts FICA's position on this issue.

ISSUE 5: Did the FCG's screening process used to select candidate technologies adequately consider alternative and emerging technologies?

POSITIONS

STAFF: Yes.

FCG: Yes. Seventy-five alternative generation technologies (including both existing and emerging technologies) were included in the screening process. Preliminary screening eliminated 55 technologies, including any technologies that would not be commercially available before 1997. The 20 remaining technologies (including two types of IGCC units) were carried through economic screening curve analysis. The screening curves were used to identify the three technologies subjected to detailed economic analysis. (Gillette; Exhibit 102)

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FPC: Agree with FCG.

FPL: Although the FCG's screening process is adequate for statewide assessments, the FCG process is reflective of the aggregated technology risk perceptions of individual utilities composing the FCG. Therefore, the screening process cannot reflect each individual utility's risk perception and acceptance threshold. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Yes.

FICA: No position.

FGT: Agree with FCG.

DADE: No position.

LONG RANGE GENERATION EXPANSION PLANNING STUDY

ISSUE 6: Is the FCG's long range generation expansion planning study reasonably adequate for estimating peninsular Florida's future electrical capacity needs?

POSITION

STAFF: Yes.

FCG: Yes. The study produces a valid picture of Peninsular Florida's future electrical capacity needs over the study period. The study used reasonable assumptions, a sound methodology, and was performed by experienced utility forecasters and planners. It was fully documented in a comprehensive report, and detailed backup information was available to all parties through the discovery process. (Basford, Gillette)

FPC: Agree with FCG.

FPL: Yes. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: Yes, but only for the purpose of meeting the information-source objective of the Planning Hearing. (Seidman)

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FGT: Yes.

DADE: No. The forecasts discount the timing for need of new capacity by unmet conservation goals and new, optional, out-of-state purchases. (Dellapa)

ISSUE 7: Did the FCG adequately address fuel flexibility in its long-range planning study?

POSITIONS

STAFF: Yes.

FCG: Yes. Fuel flexibility was one of several strategic considerations addressed in the FCG's study. The combined cycle and combustion turbine options provide the capability to burn either oil or gas. In addition, these options can be retrofitted with coal gasifiers if the price differential between coal and oil or gas becomes large enough to make the addition cost-effective. (Basford, Gillette)

FPC: Agree with FCG.

FPL: Agree with FCG. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: No. Fuel flexibility requires that a unit be able to burn coal, as well as oil and gas. Since oil and gas prices/availability are closely linked and are potentially volatile, a unit that can burn only those two fuels lacks the "flexibility" to switch to a fuel that is more insulated from the vulnerabilities of the oil and gas markets. (Seidman)

FGT: Yes, agree with FCG.

DADE: No. Dade County adopts FICA's position on this issue.

ISSUE 8: With respect to peninsular Florida reliability, is the impact of assistance from the Southern system adequately addressed in the planning study?

POSITIONS

STAFF: Yes.

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FCG: Yes. For reliability purposes, the study modeled the assistance to peninsular Florida from the Southern System on a probabilistic basis, assuming that the assistance available to Florida would equal the existing Unit Power Sales (UPS) contracts at 90% availability plus 50% of Southern's available daily reserves after meeting operating and other system requirements. The total assistance cannot exceed the transfer capability (3200 MW). This assumption was based on the best judgment of the FCG study group, after consultations with Southern. (Basford, Gillette)

FPC: Agree with FCG.

FPL: Agree with FCG. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: No position.

FGT: Yes.

DADE: No position.

ISSUE 9: Do the type and timing of unit additions in the FCG's long range planning study characterize a least-cost generation expansion plan?

POSITIONS

STAFF: Yes.

FCG: Yes, given that a least cost plan is defined as one that properly takes into account both financial and nonfinancial strategic concerns in order to select optimal unit additions that have the least cost from a financial, risk and strategic perspective. (Basford, Gillette)

FPC: Agree with FCG.

FPL: FCG's generation expansion plan cannot simply be characterized as a "least-cost" generation expansion plan. FPL maintains that the appropriate approach to generation expansion planning is a planning process which considers not only costs but also attendant risks and strategic factors. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

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OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: No. A least-cost generation expansion plan should evaluate all alternatives or combinations of alternatives reasonably available for the purpose of either supplying generation and transmission capacity to meet projected demand or alternative means of reducing projected demand at the least cost, consistent with strategic considerations. The FCG Long Range Planning Study does not do this because it incorporates some demand and supply alternatives to utility generation as internal to the study. All alternatives to utility generation have not been considered as equally available suppliers or demand reducers. Therefore, it cannot be concluded that the type and timing of unit additions characterize a least-cost generation expansion plan. (Seidman)

FGT: No position.

DADE: No. The study did not consider (i) cogeneration and small power production on an equal economic basis as conservation, load management, interruptible service goals and new power purchases from Southern Companies; (ii) the evaluation criteria for "least cost" generation did not consider the value of primary fuel efficiency and Florida's balance of payments; and (iii) the methodology for determining the value of avoiding building a utility plant is based on the value of deferral rather than the revenue requirements a utility would receive if they actually built the avoided unit. (Dellapa)

ISSUE 10: With respect to peninsular Florida reliability, is the impact of assistance from the Southern system addressed adequately in the avoided unit study?

POSITIONS

STAFF: Yes.

FCG: Yes. For reliability purposes, the study modeled the assistance to peninsular Florida from the Southern System on a probabilistic basis, assuming that the assistance available to Florida would equal the existing Unit Power Sales (UPS) contracts at 90% availability plus 50% of Southern's available daily reserves after meeting operating and other system requirements. The total assistance cannot exceed the transfer capability (3200 MW). This assumption was based on the best judgment of the FCG study group, after consultations with Southern. (Basford, Gillette)

FPC: Agree with FCG.

FPL: Agree with FCG. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

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JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: No position.

FGT: No position.

DADE: No position.

ISSUE 11: Do biases exist in the FCG's long-range planning study against adding coal units, combined cycle units or combustion turbine units?

POSITIONS

STAFF: Biases against adding coal units may result from assumptions regarding the fuel forecasts, coal unit availability and availability of economy purchases. Biases against adding combined cycle units may result from assumptions regarding the capital cost of coal units and fuel forecasts. Biases against combustion turbines may result from assumptions regarding the fuel forecasts.

FCG: No. The assumptions and methodology of the study were designed to minimize or eliminate biases for or against any generating alternative. Numerous sensitivity studies were performed to show the effect on the study results of changes in key assumptions. (Basford, Gillette)

FPC: Agree with FCG.

FPL: No. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: Yes. Biases appear to exist in that coal unit sizes are constrained in a way which may be unreasonable for the intended purpose. As a result, the greater reliability and fuel flexibility of coal units is ignored or understated as is the availability of smaller increments of QF capacity with characteristics of coal-fired generation. This bias tends to understate the benefits of QF capacity deferring coal generation in smaller increments, thereby undervaluing QF capacity.

Further, FCG's studies failed to include the cost of coal gasification in the cost of combined cycle units. Combined cycle units were selected because they can burn oil and gas, which are relatively inexpensive at present. They are alleged to have the capability to burn coal or coal derivatives if the availability and/or price of oil and gas so dictate. However, this capability is available

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only after the addition of costly and potentially risky coal-gasification/treatment equipment. If fuel flexibility is a factor in selecting units, then the cost of providing that flexibility must be included. Because such costs are not included, the understated cost of combined cycle units results in a bias in their favor. (Seidman)

FGT: Agree with FCG.

DADE: Yes. Dade County adopts FICA's position on this issue. (Dellapa)

AVOIDED UNIT STUDY

ISSUE 12: Does the FCG's avoided unit study provide a reasonably adequate basis on which to set cogeneration prices for peninsular Florida?

POSITIONS

STAFF: Yes. (Ballinger)

FCG: The avoided unit study demonstrates that the avoided unit is a 220 MW combined cycle unit in 1992. FCG has no position on how this information should be used in the setting of cogeneration prices. (Gillette)

FPC: Yes.

FPL: Yes; however, the individual utilities' avoided unit studies provide a better basis on which to set cogeneration prices. (Smith, Corn)

TECO: Yes. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: No for three reasons:

a) The FCG's Avoided Unit Study does not provide a reasonably adequate basis for the identification of the appropriate avoided unit for peninsular Florida. The studies appear to improperly treat utility capacity, demand, uncommitted conservation and certain QF self-service load. Further, the studies appear to have capacity value to as-available energy and improperly assume out-of-state capacity and energy purchases as non-avoidable utility capacity. In addition, the studies appear to employ generating units at capacity factors that are inconsistent with historical data. (Seidman)

b) The Generation Expansion Planning Studies performed by the FCG and the individual utilities do not provide the Commission with the information needed to establish

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standard offer rates for QFs. Since the studies do not treat all alternatives to Florida cogeneration on an equal basis, they do not contain the correct demand and energy inputs, they do not identify the type and quantity of generation that could be avoided by these alternatives. The studies do not contain sufficient information regarding the quantity and cost of the capacity and energy of each of the Southern units from which purchases are being made or are to be made. (Seidman)

c) In the event the Commission designates a combined cycle unit as the avoided unit, the costs included in the FCG Study are not adequate to determine a basis for capacity payments. The cost of providing for fuel flexibility, i.e., the cost of coal gasification, is needed to fairly represent the full cost of a unit with true fuel diversity characteristics. (Seidman)

FGT: No position. FGT is not addressing the issues in the proceeding concerning the avoided unit studies and appropriate payment levels to cogenerators. Taking no position as to these issues, which are irrelevant to FGT, should in no way compromise FGT's position that combined cycle units are the appropriate technology for the next addition of electric generating units in peninsular Florida.

DADE: No. The methodologies for evaluating the "cost effectiveness" of "full avoided cost" in the APH should be the same as the "cost effectiveness" methodologies for conservation, nonfirm rates, and construction of utility generation and transmission capacity. The Commission has approved differing empirical formulas for determining the "cost effectiveness" of conservation and other programs which are intended to provide price signals that result in avoiding utility capacity additions. These formulas have been named "the conservation cost effectiveness test", "the value of differal", "average embedded cost", and "the revenue requirements test". (Dellapa)

ISSUE 13: Did the FCG adequately address fuel flexibility in its avoided unit study?

POSITIONS

STAFF: Yes.

FCG: Yes. Fuel flexibility was one of several strategic considerations addressed in the FCG's study. The combined cycle and combustion turbine options provide the capability to burn either oil or gas. In addition, these options can be retrofitted with coal gasifiers if the price differential between coal and oil or gas becomes large enough to make the addition cost-effective. (Basford, Gillette)

FPC: Agree with FCG.

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FPL: Yes. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: No. Fuel, flexibility requires that a unit be able to burn coal, as well as oil and gas. Since oil and gas prices/availability are closely linked and are potentially volatile, a unit that can burn only those two fuels lacks the "flexibility" to switch to a fuel that is more insulated from the vulnerabilities of the oil and gas markets. (Seidman)

FGT: No position.

DADE: No. Dade County adopts FICA's position on this issue.

ISSUE 14: Do the type and timing of unit additions presented in the FCG's avoided unit study characterize a least-cost generation expansion plan?

POSITIONS

STAFF: Yes, given the assumptions contained in the plan. (Ballinger)

FCG: Yes, given that a least cost plan is defined as one that properly takes into account both financial and nonfinancial strategic concerns in order to select optimal unit additions that have the least cost from a financial, risk and strategic perspective. (Basford, Gillette)

FPC: Agree with the FCG

FPL: FCG's avoided unit study cannot simply be characterized as a "least-cost" generation expansion plan. FPL maintains that the appropriate approach to generation expansion planning is a planning process which considers not only costs but also attendant risks and strategic factors. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with the FCG

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: No. A least-cost generation expansion plan should evaluate all alternatives or combinations of alternatives reasonably available for the purpose of either supplying generating and transmission capacity to meet projected

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demand or alternative means of reducing projected demand at the least cost, consistent with strategic considerations. The FCG's Avoided Unit Study does not do this because it incorporates some demand and supply alternatives to utility generation as internal to the study. All alternatives to utility generation have not been considered as equally available suppliers or demand reducers. Therefore, it cannot be concluded that the type and timing of unit additions characterize a least-cost generation expansion plan. (Seidman)

FGT: No position.

DADE: No. The study did not consider (i) cogeneration and small power production on an equal economic basis as conservation, load management, interruptible service goals and new power purchases from Southern Companies; (ii) the evaluation criteria for "least cost" generation did not consider the value of primary fuel efficiency and Florida's balance of payments; and (iii) the methodology for determining the value of avoiding building a utility plant is based on the value of deferral rather than the revenue requirements a utility would receive if they actually built the avoided unit. (Dellapa)

ISSUE 15: Do biases exist in the FCG's avoided unit study against coal units, combined cycle units or combustion turbine units?

POSITIONS

STAFF: Biases against adding coal units may result from assumptions regarding the fuel forecasts, coal unit availability and availability of economy purchases. Biases against adding combined cycle units may result from assumptions regarding the capital cost of coal units and fuel forecasts. Biases against combustion turbines may result from assumptions regarding the fuel forecasts.

FCG: No. The assumptions and methodology of the study were designed to minimize or eliminate biases for or against any generating alternative, and numerous sensitivity studies were performed to show the effect on the study results of changes in key assumptions. No biases exist that impact the result of the study.

In particular, no bias results from the use of study purposes of generating unit sizes that are commercially available; are large enough to exhibit economies of scale; and have an appropriate relationship to the size of the peninsular Florida system, which has a capacity need during the first year of the avoided unit study that exceeds the largest unit size used in the study.

Furthermore, no bias results from excluding the costs of coal gasification from the cost data for combined cycle units. Costs related to conversion to coal should be deferred for as long as possible, to avoid burdening ratepayers with such costs unless and until conversion

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proves to be cost-effective. FCG's studies show that coal gasification for the 1992 combined cycle units is not cost-effective under either the base case fuel forecast or the fuel forecast sensitivities.

FPC: Agree with FCG.

FPL: No. (Smith)

TECO: Agree with the FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKELAND: Agree with FCG.

FICA: Yes. Biases appear to exist in that coal unit sizes are constrained in a way which may be unreasonable for the intended purpose. As a result, the greater reliability and fuel flexibility of coal units is ignored or understated as is the availability of smaller increments of QF capacity with characteristics of coal-fired generation. This bias tends to understate the benefits of QF capacity deferring coal generation in smaller increments, thereby undervaluing QF capacity.

Further, studies failed to include the cost of coal gasification in the cost of combined cycle units. Combined cycle units were selected because they can burn oil and gas, which are relatively inexpensive at present. They are alleged to have the capacity to burn coal or coal derivatives if the availability and/or price of oil and gas so dictate. However, this capacity is available only after the addition of costly and potentially risky coal-gasification/treatment equipment. If fuel flexibility is a factor in selecting units, then the cost of providing that flexibility must be included. Because such costs are not included, the understated cost of combined cycle units results in a bias in their favor. (Seidman)

FGT: No position.

DADE: Yes. Dade County adopts FICA's position on this issue. (Dellapa)

ISSUE 16: What are the appropriate avoided units for peninsular Florida?

POSITIONS

STAFF: Three 220 MW combined cycle units with an in-service date of January 1, 1992. (Ballinger)

FCG: The appropriate avoided unit is a 220 MW combined cycle unit in 1992. (Basford, Gillette)

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FPC: Agree with FCG.

FPL: Based upon the utilities' individual submissions filed pursuant to Florida Administrative Code Rule 25-17.083(4)(a), the avoided unit for peninsular Florida is a 385 MW Combined Cycle Unit in 1992. The next avoided unit for peninsular Florida is a 220 MW Combined Cycle Unit in 1992. (Smith, Corn)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: The appropriate unit is a base load coal plant in service in 1989. If the Commission designates a combined cycle unit as the avoided unit, QFs would not be adequately compensated for the avoided cost of energy. Rule 25-17.083 assumes that the avoided unit will be a base load unit with relatively low fuel costs. QFs will receive less than full avoided cost if a combined cycle unit is designated. Subsection (6) of the rule requires that QFs be paid the lesser of the avoided energy cost of the statewide unit and the as-available energy cost, matching relatively high base capacity costs with relatively low base energy costs. However, if a combined cycle unit is designated, the relatively low combined cycle capacity payments will at times be mismatched with relatively low coal-based energy cost payments. (Seidman)

FGT: No position.

DADE: Dade County adopts FICA's position on this issue.

ISSUE 17: Based upon the appropriate avoided unit, how should firm capacity and energy payments be set?

POSITIONS

STAFF: Firm capacity payments should be developed using the value of deferral methodology. Prior to 1992, firm energy payments should be based on the purchasing utility's avoided energy costs. Beginning in 1992, firm energy payments should be the lesser of the avoided unit's energy costs and the individual utility's avoided energy costs. The avoided unit's energy costs should be based on the lesser of the costs of low sulfur residual fuel oil and natural gas. Variable operation and maintenance (O&M) costs should be included in firm energy payments. (Ballinger)

FCG: No position.

FPC: Agree with Staff, provided that the "appropriate avoided unit" is understood to be the unit avoided by the individual purchasing utility.

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FPL: Firm capacity payment should be developed using the value of deferral methodology. Prior to 1992, firm energy payment should be based on the purchasing utility's avoided energy costs. Beginning in 1992, firm energy payments should be the lesser of the avoided unit's energy costs and the individual utility's as available energy costs. After 1992, O&M costs should be included in the calculation of firm capacity payments. (Corn)

TECO: Firm capacity payments should be developed using the value of deferral methodology. Prior to the in-service date of the avoided unit, firm energy payments should be based on the purchasing utility's avoided energy cost. Beginning with the in-service date of the avoided unit, firm energy payments should be the lesser of the avoided unit's energy cost and the individual utility's as-available energy cost. After the in-service date, O&M costs should be included in the calculation of firm capacity payments. (Ramil)

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: They should be developed in the same fashion as the current prices for firm energy and capacity under existing standard offer tariffs. These existing tariffs need only be adjusted to reflect changes in the value of deferral due to updating of financial parameters, escalation rates, tax changes and the like. In addition, the tariffs should also be modified to reflect the appropriate in-service year. (Seidman).

FGT: No position.

DADE: Dade County adopts FICA's position on this issue.

ISSUE 18: To the extent possible within the limits of Rule 27-17.083, Florida Administrative Code, should the capacity and energy payments to be established provide for the development of a range of alternative generating technologies?

POSITIONS

STAFF: Yes. However, this should not result in a subsidization of alternative technologies by utility ratepayers.

FCG: No position.

FPC: No position.

FPL: Yes. To the extent that more than one generation type alternative results in approximately the same total level of payments of the purchase of firm energy and capacity from qualifying facilities over the life of the

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contract, FPL proposes alternative Standard Offer contracts which allow for pricing to be based on the avoidance of more than one generation type. This could also be achieved through individually negotiated contracts. (Corn)

TECO: Utilities should pay no more than their risk adjusted avoided cost for QF supplied energy and capacity. (Ramil)

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: They should be based primarily on base load generating plant technology and operating characteristics. However, those QFs which exhibit different characteristics should be eligible for capacity payments commensurate with their particular characteristics. (Seidman).

FGT: No position.

DADE: Yes. (Dellapa)

ISSUE 19: What should be the capacity factor eligibility criterion to receive firm capacity and energy payments pursuant to the 1992 combined cycle avoided unit?

POSITIONS

STAFF: Cogenerators should be eligible to receive firm energy and capacity payments pursuant to a standard offer contract based on the 1992 combined cycle units if they supply energy at any capacity factor greater than or equal to 69%. (Ballinger)

FCG: No position.

FPC: To be eligible for firm energy and capacity payments, a QF should operate at or above both the average capacity factor and the peak period capacity factor of the avoided unit. Establishment of a minimum peak period capacity factor is particularly essential when non-base load generation (combustion turbine or combined cycle) is selected as the avoided unit.

FPL: The capacity factor requirement prescribed by the cogeneration rules is 70% which is based on a 12-month rolling average. However, subsection (3)(a)(iii) of Rule 25-17.083 allows for "additional criteria reasonably required by the utility planning the statewide avoided unit, related to the delivery of firm energy and capacity by the qualifying facility during the utility's daily and seasonal peak periods." Therefore, FPL's position is that it is entirely appropriate to make additional capacity factor eligibility criteria consistent with the optimum

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operation of the designated statewide avoided unit as determined in the generation planning studies of the utility with the statewide avoided unit. (Smith, Corn)

TECO: 70% as provided in the Commission's existing rules pertaining to cogeneration and small power production. (Ramil)

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: Based on the information made available by the FCG, the capacity factor eligibility should be reduced to 40% to correspond with the average duty cycle at which a combined cycle would be expected to operate. (However, this is not consistent with present rules). (Seidman)

FGT: No position.

DADE: No position.

ISSUE 20: Should investor-owned utilities file standard offer tariffs which reflect pricing of the appropriate avoided unit? And if so, what should be the effective date of those tariffs?

POSITIONS

STAFF: Yes. These tariffs should have an effective date which corresponds to the date of the Commission's vote on this docket. (Ballinger)

FCG: No position.

FPC: No position.

FPL: Yes, as required by Commission rule. The date of the Commission's vote resolving this case should be the effective date of the standard offer tariffs. (Corn)

TECO: Investor-owned utilities should file standard offer contracts as of the effective date of the Commission's vote. (Ramil)

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: Yes. The revised standard offer should be available to any QF immediately upon the Commission vote. The utilities need only revise their tariffs to reflect any changes prescribed by the Commission. (Seidman)

FGT: No position.

DADE: Yes, the effective date should be the date of the Commission's final determination after appeal rights have been exhausted.

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ISSUE 21: For investor-owned utilities, what are the appropriate values for the following parameters associated with the avoided unit?

- a. Type of Fuel
- b. Average Annual Heat Rate
- c. Cost of Fuel
- d. 1988 Construction Cost \$/KW
- e. Construction Escalation Rate
- f. In-Service Cost (\$/KW)
- g. Incremental Capital Structure
 1. Debt
 2. Preferred Stock
 3. Common Stock
- h. Cost of Capital
 1. Debt
 2. Preferred Stock
 3. Common Stock
- i. Plant Life
- j. AFUDC Rate
- k. Effective Federal/State Tax Rate
- l. Other Taxes and Insurance
- m. Discount Rate
- n. In-service Fixed O&M Costs (\$/KW/yr)
- o. In-service Variable O&M Costs (\$/Mwh)
- p. Variable O&M Escalation Rate
- q. Value of K

POSITIONS

STAFF: The parameters are as follows:

a. Type of fuel	distillate/ natural gas	
b. Average heat rate	8,394 (Btu/kwh)	
c. Cost of fuel	Lesser of distillate and natural gas at Putnam	
d. 1988 construction cost (\$/KW)	470	
e. Construction escalation rate	5.6%	
f. In-service Cost		620
g. Capital - debt		44%
p.stock		9%
equity		47%
h. Cost of capital - debt	9.9%	
p. stock	8.8%	
equity	14.2%	
i. Book life		30 years
j. AFUDC rate		11.82%
k. Effective Federal/ State tax rate	37.63%	
l. Other taxes and insurance	1.5%	
m. Discount rate		10.18%
n. In-service fixed O&M costs	8.94	
o. In-service variable O&M	2.27	
p. Variable O&M escalation rate	5.4%	
q. Value of K		1.5975

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FCG: FCG takes no position on the values to be used for cogeneration pricing. For the Commission's information, the FCG study used the following parameters for the 1992 combined cycle unit (the avoided unit). As indicated below, items "c", "e", and "p" vary year by year. See the indicated pages of the FCG's Generation Expansion Planning Studies document for the year by year values. (Gillette)

Combined Cycle Unit

- a. Oil, gas, coal (future)
- b. 8,394 Btu/kWh
- c. Varies (see page 151)
- d. \$470
- e. Varies (see page 160)
- f. \$620 (1992\$)
- g. Debt 44%
Preferred Stock 9%
Common Stock 47%
- h. Debt 9.9%
Preferred Stock 8.8%
Common Stock 14.2%
- i. 30 Years
- j. 11.82%
- k. 37.63%
- l. 1.5%
- m. 10.18%
- n. \$8.94 (\$/kW/yr)
- o. \$2.27 (\$/MWh)
- p. Varies (See page 160)
- q. 1.5219

FPC: Agree with FCG.

FPL: The appropriate values for the following parameters associated with the avoided unit are those values taken from Forms 3.1, 3.2 and 3.3 in the study from the utility the Commission identified as having the statewide avoided unit. From the individual utilities filings, it would appear that the parameters associated with FPL's 1992 Combined Cycle Unit are appropriate. (Smith)

- a. Natural gas/distillate
- b. 7,620 Btu/kWh
- c. 3.08 cents/kWh (1992 dollars)
- d. \$511.6/Kw
- e. Varies from 3.6 to 6.1% over time
- f. \$686.29/Kw
- g. Debt 43%
Preferred Stock 9%
Common Stock 48%
- h. Debt 10%
Preferred Stock 9%
Common Stock 14.5%
- i. 30 Years
- j. 12.0%
- k. 37.63%
- l. 1.6%
- m. 10.45% after tax; 12% pre tax
- n. \$14 (\$/kW/yr)
- o. \$.59 (\$/MWh)
- p. Varies between 3.5 and 6.0% (See Form 1.3. p. 2 of 2)
- q. 1.431

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TECO: For the parameters associated with a statewide avoided unit, Tampa Electric agrees with the values provided in the FCG position. (Ramil)

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA:

- a. Coal
- b. 10,000 Btu/kWh
- c. Coal at TECO's Big Bend#4
- d. \$1,023
- e. 5.6%
- f. \$1,156 (1989)
- g. Debt 44%
Preferred Stock 9%
Common Stock 47%
- h. Debt 9.9%
Preferred Stock 8.8%
Common Stock 14.2%
- i. 30 Years
- j. 11.82%
- k. 37.63%
- l. 1.5%
- m. 10.18%
- n. \$21.53 (\$/kW/yr)
- o. \$4.65 (\$/MWh)
- p. 5.53%
- q. No position at this time

However, if the Commission designates a combined cycle unit as the avoided unit, the costs included in the FCG Study are not adequate to determine a basis for capacity payments. The cost of providing for fuel flexibility, i.e., the cost of coal gasification, is needed to fairly represent the full cost of a unit with true fuel diversity characteristics. (Seidman)

FGT: No position.

DADE: Dade County adopts FICA's position on this issue.

ISSUE 22: Should the location of the QF be considered in determining the amount of capacity to be deferred or avoided?

STAFF Agree with FICA. (Ballinger)

FCG: No position.

FPC: Agree with FPL.

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FPL: Yes. The ability of a utility to accept QF capacity may be adversely impacted by the inability of the transmission system to accept the incremental power. In addition, incremental QF capacity may impair the utility's ability to utilize its transmission system capability for economic or assistance interchange. Since transmission capability is a function of location on the electrical grid, the location of a QF should be considered in determining the net capacity benefit to the receiving utility. The effects of location must be evaluated on a case-by case basis. (Smith, Corn)

TECO: Yes.

SEC: Agree with FCG.

JEA: No position.

OUC, TALLAH, LAKELAND: Yes.

FICA: No. Because the FCG study is based on generic unit additions, it does not recognize cost savings or penalties associated with plant location, land costs, environmental tradeoffs, etc. it would therefore be inappropriate to consider the impact of location, beneficial or otherwise, of QF locations for purposes of this docket. (Seidman)

FGT: No position.

DADE: Yes, but as an alternative to utility transmission and generation options. (Dellapa)

ISSUE 23: Should the evaluation and approval of all programs which are competing capacity alternatives (i.e., conservation, load management, interruptible service, cogeneration, resource recovery, out-of-state purchases, etc.) that can be compared to building new utility generation and transmission be incorporated into the Commission's annual planning hearing?

STAFF: Agree with FCG. (Ballinger)

FCG: No. It would be administratively impractical to expand the scope of the APH to include evaluation and approval of all such programs. (Basford, Gillette)

FPC: No.

FPL: Yes, if such evaluation is performed on an individual utility basis. (Smith)

TECO: The focus of the planning hearings is on optimizing supply side alternatives. Existing and expected cost-effective demand side programs are considered in the process. The demand side programs which are cost-effective are, by definition, less costly than supply side alternatives. Therefore, the appropriate focus of the planning hearings is on supply side alternatives. (Ramil)

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SEC: Agree with FCG.

JEA: Agree with TECO.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: Yes. The Avoided Cost Studies performed by the FCT and the individual utilities do not properly consider all alternative resources (conservation, load management cogeneration and out-of-state purchases) for avoiding the construction of capacity on an equal basis. If all alternatives to construction by Florida utilities are considered on an equal footing it would change the avoided unit from a combined cycle unit in 1992 to a coal fired unit in 1989. (Seidman)

FGT: No position.

DADE: Yes. Evaluation of the need for new capacity and the cost/benefit of the various capacity addition options should be evaluated on a common empirical basis. A single statewide Electrical Energy Generation and Use Plan should be developed. (Dellapa)

ISSUE 24: Should the methodology for evaluating capacity addition alternatives include higher weighted cost considerations for capacity additions which improve the efficiency of primary fuels, use renewable primary fuels, improve in-state energy resource reliability, improve system reliability based on location and system need?

STAFF: These considerations are already taken into account in the FCG studies, or are not appropriate for inclusion in a statewide avoided unit study. (Ballinger).

FCG: No position.

FPC: No.

FPL: Except for renewable primary fuels and improving system reliability based on location and system need, these factors are already evaluated. As noted in Issue 28, the impact of location on system reliability and need should be considered. (Smith)

TECO: No. The methodology for evaluating capacity addition alternatives should be designed to produce a resulting capacity addition plan which is the most economical evaluated plan for Florida's ratepayers. (Ramil)

SEC: Agree with FCG.

JEA: Agree with TECO.

OUC, TALLAH, LAKE LAND: No position.

FICA: The Commission should consider evaluating relative value of capacity alternatives based on the

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characteristics of the alternative, to the extent permissible under the Commission's statutory authority. (Seidman)

FGT: No position.

DADE: Yes. The Commission should consider the energy and economic advantages and disadvantages of all energy consumers, including the utility in evaluating cost-effectiveness.

ISSUE 25: Should subscription to the standard offers be limited?

POSITIONS

STAFF: Yes. Subscription to standard offers should be limited to the number of megawatts of the units upon which the offers are based. (Ballinger)

FCG: No position.

FPC: Yes.

FPL: If the Commission decides to designate one or more generic avoided units without designating the utility or utilities with those units, then a subscription limit equivalent to the MWs of the designated avoided unit(s) should be developed for the standard offer. (Smith, Corn)

TECO: The concept of subscription to the standard offer has not been developed to the point where Tampa Electric can conclude that it would be appropriate to use this concept in pricing cogeneration and small power production. Thus, it would be premature at this time to attempt to set limits on the subscription to standard offers. (Ramil)

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: No position.

FGT: No position.

DADE: No position.

ISSUE 26: Should a subscription limit be established for the amount of cogeneration power to be purchased by the individual investor-owned utilities?

POSITIONS

STAFF: Yes. (Ballinger)

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FCG: No position.

FPC: Yes, if properly established.

FPL: If the Commission decides to designate one or more generic avoided units without designating the utility or utilities with those units, then a subscription limit for individual investor-owned utilities should be established. (Smith, Corn)

TECO: This reference to subscription appears to encompass a procedure in which cogeneration would be allocated among the investor-owned utilities. This concept needs to be more fully developed in order to clarify how it would operate. Until that time, it is premature to attempt to establish a subscription (allocation) limit. (Ramil)

SEC: No position at this time.

JEA: Agree with TECO.

OUC, TALLAH, LAKE LAND: Agree with TECO.

FICA: No position.

FGT: No position.

DADE: No position.

ISSUE 27: If the Commission determines that there should be a subscription amount for investor-owned utilities, how should that amount be calculated and what are the proper subscription amounts for each utility?

STAFF: The subscription limit should be developed by applying the following percentages to the MW of the avoided units: 40% to FPL, 19% to FPC, 8% to TECO and 33% to the municipals and rural electric cooperatives. (Ballinger)

FCG: No position.

FPC: A subscription limit for each individual utility should be based on the size and timing of the individual utility's avoided unit.

FPL: If the Commission declines to designate the utility with the avoided unit(s) and creates a generic avoided unit, the capacity of that unit should be allocated among the utilities with capacity needs in that year. Those allocation factors should be derived by totalling all the MWs of capacity needed in a given year from all the utilities' individual plans then dividing each utility's capacity need for that year by that total. For instance, if the individual plans show three utilities needing capacity in 1991, utility A needing 200 MW, utility B needing 200 MW and utility C needing 400 MW, and the Commission found the avoided unit or units to be 600 MW in 1992, the allocation would be: utility A - 150 MW; utility B - 150 MW; utility C - 300 MW. (Smith, Corn)

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TECO: In view of Tampa Electric's response to Issue 34, it is premature to calculate percentage allocations for the affected electric utilities. (Ramil)

SEC: Agree with FCG.

JEA: Agree with TECO.

OUC, TALLAH, LAKE LAND: Agree with TECO.

FICA: No position.

FGT: No position.

DADE: NO position.

ISSUE 28: If the 1992 avoided units are fully subscribed prior to January 1, 1990, what action should then be taken?

POSITION:

STAFF: The Commission should designate subsequent avoided units: in 1993 five 220 MW combined cycle units and in 1994 two 220 MW combined cycle units. As soon as the 1992 combined cycle units are fully subscribed or until January 1, 1990, whichever comes first, the Commission should remove the 1992 avoided unit standard offer and substitute a new standard offer based on the 1993 combined cycle units. Similarly, once the 1994 units are fully subscribed, then that standard offer would be removed and a new standard offer, based on the next identified unit in the FCG's avoided unit study would be substituted. (Ballinger)

FCG: No position.

FPC: Given the frequency of Planning Hearings every two years, FPC does not consider it necessary to provide for subscriptions in excess of the avoided unit within that short interval. However, if such additional subscription limits are established, they should be based on each individual utility's subsequent avoided unit.

FPL: In developing the standard offer to be offered to QFs, the Commission should designate a series of avoided units with the understanding that once an avoided unit becomes fully subscribed, the terms of the standard offer would change to correspond to the parameters associated with next succeeding unit. The Commission should designate a sufficient number of avoided units to avoid the possibility of full subscription prior to January 1, 1990. (Smith, Corn)

TECO: Tampa Electric does not embrace the concept of subscription. The company would simply continue to apply the existing Commission rules on cogeneration and small power production. (Ramil)

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SEC: Agree with FCG.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: FICA has no position on this issue but is concerned that it presupposes designation of a combined cycle unit with a 1992 in-service date. This is a determination to be made by the Commission in this proceeding. (Seidman)

FGT: No position.

DADE: No position.

ISSUE 29: What should be the capacity factor eligibility requirements for receiving firm capacity and energy payments pursuant to: a) the designated 1993 avoided units, and b) the designated 1994 avoided units?

POSITIONS

STAFF: Cogenerators should be required to supply energy to the purchasing utility in both instances at an average annual capacity factor of 69% or greater. (Ballinger)

FCG: No position.

FPC: To be eligible for firm energy and capacity payments, a QF should operate at or above both the average capacity factor and the peak period capacity factor of the avoided unit.

FPL: The capacity factor requirement prescribed by the cogeneration rules is 70% which is based on a 12-month rolling average. However, subsection (3)(a)(iii) of Rule 15-17.083 allows for "additional criteria reasonably required by the utility planning the statewide avoided unit, related to the delivery of firm energy and capacity by the qualifying facility during the utility's daily and seasonal peak periods." Therefore, FPL's position is that it is entirely appropriate to make additional capacity factor eligibility criteria consistent with the optimum operation of the designated statewide avoided unit as determined in the generation planning studies of the utility with the statewide avoided unit. (Smith, Corn)

TECO: Tampa Electric does not embrace the concept of subscription. Therefore, the capacity factor should be the same as prescribed in the Commission's rules for the designated avoided unit. (Ramil)

SEC: No position.

JEA: No position.

OUC TALLAH, LAKE LAND: No position.

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FICA: FICA has no position on this issue but is concerned that it presupposes designation of combined cycle units with a 1994 in-service date. This is a determination to be made by the Commission in this proceeding. (Seidman)

FGT: No position.

DADE: No position.

ISSUE 30: How should firm energy and capacity payments be set for these subsequent avoided units?

POSITIONS

STAFF: Firm capacity payments should be developed using the value of deferral methodology. Prior to 1993, firm energy payments should be based on the purchasing utility's avoided energy costs. Beginning in 1993, firm energy payments should be the lesser of the avoided unit's energy costs and the individual utility's avoided energy costs. The avoided unit's energy costs should be based on the lesser of the costs of low sulfur residual fuel oil and natural gas. Variable operation and maintenance (O&M) costs should be included in firm energy payments. (Ballinger)

FCG: No position.

FPC: Agree with Staff, provided that the "subsequent avoided units" are understood to be the units avoided by the individual purchasing utility. No position.

FPL: No position.

TECO: Although Tampa Electric does not embrace the concept of subscription, the company feels that firm energy and capacity payments can be properly set. Firm capacity payments should be developed using the value of deferral methodology. Prior to the in-service date of the avoided unit, firm energy payments should be based on the purchasing utility's avoided energy cost. Beginning with the in-service date of the avoided unit, firm energy payments should be the lesser of the avoided unit's energy cost and the individual utility's as-available energy cost. After the in-service date, O&M costs should be included in the calculation of firm energy payments. (Ramil)

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: FICA has no position on this issue but is concerned that it presupposes designation of combined cycle units with a 1994 in-service date. This is a determination to be made by the Commission in this proceeding. (Seidman)

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FGT: No position.

DADE: No position.

ISSUE 31: For investor-owned utilities, what are the appropriate parameters for the subsequent avoided units?

- a. Type of Fuel
- b. Average Annual Heat Rate
- c. Cost of Fuel
- d. 1986 Construction Cost \$/KW
- e. Plant Cost Escalation Rate
- f. In-Service Cost (\$/KW)
- g. Incremental Capital Structure
 1. Debt
 2. Preferred Stock
 3. Common Stock
- h. Cost of Capital
 1. Debt
 2. Preferred Stock
 3. Common Stock
- i. Plant Life
- j. AFUDC Rate
- k. Effective Federal/State Tax Rate
- l. Other Taxes/Insurance
- m. Discount Rate
- n. In-service Variable O&M Costs
- o. In-Service Variable O&M Costs
- p. O&M Escalation Rate
- q. K-Factor

POSITIONS

STAFF:

	<u>1993</u>	<u>1994</u>	<u>1995</u>
a.	distillate/natural gas		coal
b.	8,394	8,394	9,790
c.	lesser of distillate & gas at Putnam		Coal at Big Bend #4
d.	470	470	1,023
e.	5.6%	5.6%	5.6%
f.	649	681	1,603
g.	44%	44%	44%
h.	9.9%	9.9%	9.9%
	8.8%	8.8%	8/8%
	14.2%	14.2%	14.2%
i.	30 yrs.	30 yrs.	30 yrs.
j.	11.82%	11.82%	11.82%
k.	37.63%	37.63%	37.63%
l.	1.5%	1.5%	1.5%
m.	10.18%	10.18%	10.18%
n.	9.41%	9.92%	29.74%
o.	2.39%	2.52%	6.42%
p.	5.4%	5.4%	5.4%
q.	1.5975	1.5975	1.5975

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FCG: FCG takes no position on the values to be used for cogeneration pricing. For the Commission's information, the FCG study used the following parameters for combined cycle units, combustion turbines units, and coal units. As indicated below, items "c", "e", and "p" vary year by year. See the indicated pages of the FCG's Generation Expansion Planning Studies document for the year by year values. (Gillette)

	<u>Combined Cycle Units</u>	<u>Combustion Turbine Units</u>	<u>Coal Units</u>
a.	oil, gas, coal (future)	Oil, gas, coal (future)	Coal
b.	8,394 Btu/kWH	13,800 Btu/kWH	9,790 Btu/kWh
c.	Varies (see p. 151)	Varies (see p. 151)	Varies (see p. 154)
d.	\$470	\$283.00	\$1,023
e.	Varies (see p. 160)	Varies (see p. 160)	Varies (see p. 160)
f.	\$717 (1995 \$)	\$417 (1995 \$)	\$1,603 (1995 \$)
g.	44% 9% 47%	44% 9% 47%	44% 9% 47%
h.	9.9% 8.8% 14.2%	9.9% 8.8% 14.2%	9.9% 8.8% 14.2%
i.	30 yrs.	20 yrs.	30 yrs.
j.	11.82%	11.82%	11.82%
k.	37.63%	37.63%	37.63%
l.	1.5%	1.5%	1.5%
m.	10.18%	10.18%	10.18%
n.	\$10.47	\$0.70	\$29.74
o.	\$2.66	\$6.29	\$6.42
p.	Varies (see p. 160)	Varies (see p. 160)	Varies (see p. 160)
q.	1.5219	1.5020	1.5219

FPC: No position.

FPL: No position.

TECO: Although Tampa Electric does not embrace the concept of subscription, the company accepts the FCG's parameters for the subsequent avoided units. (Ramil)

SEC: Agrees with FCT.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: FICA has no position on this issue but is concerned that it presupposes designation of combined cycle units with a 1994 in-service date. This is a determination to be made by the Commission in this proceeding. (Seidman)

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FGT: No position.

DADE: No position.

ISSUE 32: Does the FCG Generation Expansion Planning Studies provide for adequate fuel diversity within the peninsula?

POSITIONS

STAFF: Yes. (Ballinger)

FCG: Yes. The FCG studies take statewide fuel diversity into consideration as a strategic factor. The FCG studies show the addition of combined cycle units fired on natural gas, combustion turbine units fired on distillate oil, and pulverized coal units fired on coal. The addition of these units would contribute toward maintaining fuel diversity within the Peninsula. (Basford, Gillette)

FPC: Agree with FCG.

FPL: Yes. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKELAND: Agree with FCG.

FICA: No, because it appears that the studies result in replacing a substantial portion of coal-based capacity from the Southern System with oil and gasified combined cycle units. (Seidman)

FGT: Yes. Agree with FCG that the ability of combustion turbines and combined cycle units to use gas or oil and the capability of conversion of combined cycle units to utilize coal provides fuel diversity.

DADE: No. The Planning Study is not consistent with the South Florida Regional Planning Council's energy goals established under the Florida Growth Management Plan.

ISSUE 33: Should the Commission designate a unit that does not burn coal?

STAFF: Agree with FCG. (Ballinger)

FCG: The Commission should designate the optimum unit, taking into account economic and strategic considerations. Fuel type is only one of many considerations that goes into that determination. No law or policy prevents the Commission from designating a unit that does not burn coal. (Basford, Gillette)

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FPC: Yes.

FPL: If the individual utility filings demonstrate that the avoided unit is not a unit that burns coal, then the Commission should designate that unit as the avoided unit. The designation of a combined cycle unit does not preclude the use of coal as a fuel. (Smith, Corn)

TECO: Yes. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: The utilities' purchase of out-of-state base load coal capacity is scheduled to decrease beginning in 1993. Installation of combined cycle units that burns only oil or natural gas beginning in 1992 will increase oil and natural gas consumption and expose ratepayers to the risk of fuel price escalations before coal conversion, imposing both higher fuel costs and higher capital costs. Finally, coal-gasification is a questionable technical choice. (Seidman).

FGT: Agree with FCG.

DADE: No. Dade County adopts FICA's position on this issue.

ISSUE 34: If the Commission selects a 1989 avoided unit, should it waive the requirement of Rule 25-17.083 (3)(a) that QFs enter into a contract at least two years before the in-service date of the statewide avoided unit?

STAFF: No. The two year provision is not procedural but substantive and can't be waived under Florida case law. (Ballinger)

FCG: No position.

FPC: No.

FPL: No. Obviously, standard offer contracts entered into between now and the next planning hearing will not allow deferral or avoidance of a 1989 unit. The two year requirement in Rule 25-17.083(3)(a) was inserted to provide utilities with some planning certainty, and its waiver would adversely impact utility planning efforts and utility customers. Absent some overriding state statute or federal law or rule, the Commission cannot waive in an adjudicatory proceeding such as this its own substantive rules without committing reversible error. (Smith, Corn)

TECO: No. (Ramil)

SEC: Agree with FCG.

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JEA: No position.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: Yes. Florida utilities have purchased out-of-state capacity in lieu of offering to purchase this capacity from QFs. If such action conflicts with Federal law or circumvents Rule 25-17.083, it is appropriate to waive the 2-year threshold in subsection (3)(a) of the rule as a remedy. (Seidman)

FGT: No position.

DADE: Yes. Dade County adopts FICA's position on this issue.

ISSUE 35: Should QFs providing as-available energy receive avoided cost payments for capacity deferral?

POSITIONS

STAFF: No. (Ballinger)

FCG: No position.

FPC: No.

FPL: No. As an as-available QF is a facility that has not made a contractual commitment to the time, reliability or quantity of the energy being produced by the facility and being delivered to the utility. As such, the utility therefore cannot count on the energy being delivered by the QF for inclusion in its generation expansion plans as firm capacity in order to defer generation. (Smith, Corn)

TECO: No. (Ramil)

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: Yes, to the extent the utilities rely on QFs providing as-available energy for capacity deferral purposes in the planning process. (Seidman)

FGT: No position.

DADE: Yes. Agree with FICA.

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LEGAL ISSUES

ISSUE 36: Can and should the provisions of Rule 25-17.083, Florida Administrative Code, be waived to the extent that they are inconsistent with the findings of this proceeding?

POSITIONS

STAFF: To be technically correct, the Commission should waive the provisions of Rule 25-17.083 which conflict with the findings in this docket. However, pursuant to statute and case law the Commission may not waive or act inconsistently with its own rules.

FCG: No position.

FPC: No position.

FPL: Absent an overriding requirement of a state statute or federal law or rule, no. FPL is aware of no state law or federal requirement inconsistent with Rule 25-17.083(3)(a) which would allow the Commission to waive that rule.

TECO: No.

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: This proceeding is governed by Rule 25-17.083 and the Commission is precluded by Section 120.68(12)(b), Florida Statutes, from deviating from the provisions of the rule. However, a waiver is permissible and, in fact, is required to the extent that the rule is consistent with law or the rule itself has been circumvented.

FGT: No position.

DADE: Dade County adopts FICA's position on this issue.

ISSUE 37: Should the Commission accept as reasonable, generation expansion plans which would increase Florida utilities' consumption of and reliance on natural gas and oil fuels?

POSITIONS

STAFF: Yes. Agree with FPL.

FCG: Yes. As a legal matter, there is no prohibition against increased consumption of natural gas and oil fuels so long as the units meet the Fuel Use Act requirement for capability of conversion to burn coal. As a policy matter, the Commission should accept as reasonable a study that identifies the optimum unit additions, taking into

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account economic and strategic factors. Fuel type is only one of many factors that goes into the generation planning determination. (It should be noted that with the new generating units selected in the Long Range Planning Study, Peninsular Florida will stay below the Commission's 1980 FEECA goal of 58 million barrels at least through 1995, the last year in which the study identifies additions by fuel type.) (Basford)

FPC: Yes.

FPL: Neither FEECA nor the Commission's rules implementing FEECA preclude the Commission from accepting a generation expansion plan that would result in the increased consumption of and reliance on natural gas and oil if the plan meets other important criteria set forth in FEECA. For instance, overall cost-effectiveness is an important criterion specifically addressed, See Section 403.519, Florida Statutes. Not all the goals of FEECA are necessarily compatible, and the Commission is intended to exercise its discretion in weighing and implementing these sometimes competing policy directives. The complexity of the problems to be faced as well as the potential solutions to be implemented was specifically acknowledged by the Legislature. See Section 366.81, Florida Statutes. While an expansion plan embracing combined cycle technology may increase absolute consumption of oil and gas over levels of all coal expansion plans, it is important to understand they will result in the more efficient use of gas and a more efficient overall energy mix. Such results are consistent with the intent of FEECA. Thus, if a generation expansion plan which properly considers economic risks, relevant strategic factors and all FEECA goals, then the Commission should accept that plan as reasonable even if it would increase Florida utilities' consumption and reliance on natural gas and oil fuels.

TECO: Yes.

SEC: Yes.

JEA: Yes.

OUC, TALLAH, LAKE LAND: Yes.

FICA: No, for two reasons:

a) Rule 25-17.083 appears to be based on an assumption that a base-load coal unit will be designated and designation of any other type of unit would be inconsistent with the rule. Further, designating a unit that does not burn coal would violate FERC regulations, since Rule 25-17.083(6) would preclude a QF from receiving full avoided cost.

b) It would be contrary to FEECA to designate an avoided unit that would cause more natural gas or oil to be burned in the state for the production of energy. In the last Annual Planning Hearing, the Commission determined that

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the policies stated in Section 366.81, Florida Statutes, would not allow it to designate such a unit (Order No. 17480, at 10).

FGT: Yes. The planning for installation of combined cycle unit capable of being fired by natural gas or oil is reasonable. These units have significantly lower capital costs than coal fired units and are capable of conversion to utilize coal should relative fuel prices ever make such a choice cost effective.

DADE: Dade County adopts FICA's position on this issue.

ISSUE 38: Are the prescribed "statewide optimal generation planning studies" necessary for the purposes of setting peninsular Florida cogeneration prices?

STAFF: Yes, in addition to being useful tools, statewide planning may soon become absolutely necessary to comply with statewide sulfur dioxide emission rates and tonnage caps required by federal acid rain legislation.

FCG: No position.

FPC: No.

FPL: No. They are not required nor envisioned under the Commission's cogeneration rules. The rules envision that the Commission make a determination based upon individual utilities' filings. The primary problem with the statewide optimal plan approach is that it fails to identify the utility which has the statewide avoided unit and to estimate accurately the parameters for individual utilities' units. This, in turn, raises implementation problems in trying to market power bought pursuant to a standard offer which is higher than the individual utility's avoided cost.

TECO: The statewide optimal generation planning studies are useful tools in the planning process, although Tampa Electric would hope that the Commission would not lose sight that the circumstances faced by an individual utility may influence the appropriate prices that should be properly paid by that utility for cogenerated electricity.

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: Possibly not, but prices should be established uniformly on a statewide basis for all investor-owned utilities and not on a utility-by-utility basis. (Seidman)

FGT: No position.

DADE: Dade County adopts FICA's position on this issue.

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ISSUE 39: Does FCG's avoided unit study comply with Rule 25-17.083?

STAFF: Yes.

FCG: Yes.

FPC: Yes.

FPL: Yes.

TECO: Yes.

SEC: Agree with FCG.

JEA: Yes.

OUC, TALLAH, LAKELAND: Yes.

FICA: No. The rule requires that the studies exclude from consideration the anticipated KW and KWH contribution to the system from existing or proposed qualifying facilities which are not under contract for the delivery of firm energy and capacity. Furthermore, the rule does not contemplate that utilities will assume levels of uncommitted conservation or load management or to avoid the obligation to purchase QF capacity by making out-of-state capacity purchases. The studies submitted in this proceeding do not appear to conform with these requirements.

FGT: No position.

DADE: No. Dade County adopts FICA's position on this issue.

ISSUE 40: Does FCG's avoided unit study comply with Section 210 of PURPA and 18 C.F.R. §292.101(a)(6), 292.303(a) and 292.304(b)?

STAFF: Yes.

FCG: Yes. FCG is not aware of any federal law that dictates the content of its avoided unit study or that would limit the Commission's ability to rely on the FCG's avoided unit study.

FPC: FCG's avoided unit study is consistent with the requirement of PURPA

FPL: Yes.

TECO: Yes.

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKELAND: Agree with FCG.

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FICA: To the extent that the study does not result in the payment of full avoided costs to QFs, it does not comply with the above-referenced law and regulations. It appears that the treatment of QF energy, out-of-state purchases of energy and capacity and uncommitted conservation and load management results in the undervaluing of QF capacity and therefore payments less than full avoided cost.

FGT: No position.

DADE: No. Dade County adopts FICA's position on this issue.

ISSUE 41: Does Rule 25-17.083(3) require the utilities to make the revised standard offer available upon the vote of the Commission?

STAFF: No. Consistent with Commission practice, the revised standard offer should have an effective date coincident with the Commission's vote. The tariffs which reflect the vote should be filed for approval by the IOU's within 10 days of that vote. Such tariffs will not be available until approval by the Commission. Such approval should, however, be given as quickly as feasible.

FCG: No position.

FPC: No.

FPL: Rule 25-17.083(3) does not specifically address this issue.

TECO: No.

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: Yes. Rule 25-17.083(3) requires each utility to maintain a tariff containing a standard offer and, barring extraordinary circumstances, each utility must make the standard offer available to all QFs upon the Commission's vote. In any event, the current standard offer must remain in effect until the revised standard offer becomes available.

FGT: No position.

DADE: Yes. Dade County adopts FICA's position on this issue.

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ISSUE 42: What role should the findings of the Planning Hearing play in reviewing need determinations for electric utilities in the state filed pursuant to Sections 403.501-.517 or 403.519, Florida Statutes?

STAFF: These findings should be used only for informational purposes.

FCG: Agree with FPL.

FPC: A determination of need by the Commission pursuant to Section 403.519, Florida Statutes, must be based on evidence from the record in a proceeding conducted thereunder. The Planning Hearings serve to increase the Commission's overall understanding of present and future capacity conditions within the state, and thereby enhance the decision making process in need determination proceedings.

FPL: The need determinations statute contemplates a utility specific and unit specific need determination. Consequently, need determinations for electric utilities should be based upon the record developed in those proceedings. While the findings in the Annual Planning Hearing no doubt will be informative to the Commission and may prove helpful in crystallizing issues to be considered in the individual utility's need determinations, the findings in the APH hearing should not be binding in electric utility's individual need determinations. Given the current statewide approach, the rigid constraints of the work plan, the necessarily dated data input and other logistical constraints associated with the planning hearing, the ultimate findings are not likely to be timely or accurate in regard to an individual utility's need determination. The more relevant information can be found in the individual utilities' filings.

TECO: The results of the Planning Hearings should provide the Commission a good basis from which to address the type and timing of capacity needs in this state. With this basis and other relevant criteria, the Commission can evaluate an individual utility's request and determine if it is compatible with the statewide needs.

SEC: Agree with FCG.

JEA: Agree with FPL.

OUC, TALLAH, LAKE LAND: Agree with FPL.

FICA: Any action by a utility to add generating capacity through power plant construction or purchases from other utilities (including installation of necessary transmission facilities) or to add any demand side conservation/load management programs which were not included as planned alternatives in the expansion plans relied on by the Commission in the planning hearing process should be required to have prior Commission approval. In the event the equivalent cost of such alternatives exceeds the payments available to QFs under

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the then-effective standard offer, the utility should be required to offer to purchase capacity from QFs at the equivalent price of the alternative.

FGT: No position.

DADE: No position at this time because there needs to be legal research to determine how the State's policy regarding power plant and transmission citing relates to the State's policies regarding growth management control.

ISSUE 43: What role should the Planning Hearing play in reviewing a need determination for a qualifying facility filed pursuant to Sections 403.501-.517 or 403.519, Florida Statutes?

STAFF: These findings should be used only for informational purposes.

FCG: No position.

FPC: A determination of need by the Commission pursuant to Section 403.519, Florida Statutes, must be based on evidence from the record in a proceeding conducted thereunder. The Planning Hearings serve to increase the Commission's overall understanding of present and future capacity conditions within the state, and thereby enhance the decision making process in need determination proceedings.

FPL: Currently, the planning hearing process results in the quantification of need and the establishment of prices to be paid to QFs for capacity on a statewide basis and all electric utilities must offer to purchase capacity on a "standard offer" basis regardless of which utility has a need for capacity. Under these circumstances, it does not seem appropriate for a separate need determination for QF capacity so long as there continues to be a capacity need in excess of that contemplated by the standard offer contract.

If, on the other hand, the need for additional capacity is quantified on a utility by utility basis and prices are set accordingly, then the Commission may want to consider some coordination between the planning hearing and need determination processes. Absent resolution of the issue of subscription and consideration of timing issues, however, it is difficult to conclude how this coordination could best be accomplished.

TECO: The results of the Planning Hearings should provide the Commission a good basis from which to address the type and timing of qualifying facility construction in the state. With this basis and other relevant criteria, the Commission can evaluate a particular QF applicant's request and determine if it is compatible with the statewide needs.

SEC: Agree with FCG.

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JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: None. The need for QFs has been established by Federal law. Any facility designated as a Qualifying Facility under Federal law or which can meet Federal criteria is assumed to have established need.

FGT: No position.

DADE: No position at this time because there needs to be legal research to determine how the State's policy regarding power plant and transmission citing relates to the State's policies regarding growth management control.

MOTIONS

There are no pending motions.

STIPULATIONS

FUEL FORECASTS

ISSUE 1: Is the fuel price forecast as presented in the FCG's Generation Expansion Planning Studies document reasonably adequate for planning purposes?

POSITIONS

STAFF: Yes.

FCG: Yes. The FCG's fuel forecast used reasonable assumptions, used the most current data available at the time it was prepared, and reflected input from a number of experienced utility forecasters.

FPC: Agree with FCG.

FPL: Yes. (Smith)

TECO: Agree with FCG.

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKE LAND: Agree with FCG.

FICA: No position.

FGT: Yes.

DADE: No position.

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ISSUE 2: Are the FCG's base year weighted average fuel prices for each fuel type appropriate?

POSITIONS

STAFF: Yes

FCG: Yes.

FPC: Yes.

FPL: Yes. (Smith)

TECO: Agree with FCG.

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKELAND: Agree with FCG.

FICA: No position.

FGT: Yes.

DADE: No position.

ISSUE 3: Are the average annual escalation rates which the FCG applies to base year fuel prices derived and applied appropriately?

POSITIONS

STAFF: Yes.

FCG: Yes.

FPC: Yes.

FPL: Agree with FCG. (Smith)

TECO: Agree with FCG.

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKELAND: Agree with FCG.

FICA: No position.

FGT: Yes.

DADE: No position.

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ISSUE 4: Has the transportation component of the delivered price of coal been accounted for appropriately?

POSITIONS

STAFF: Yes.

FCG: Yes.

FPC: Yes.

FPL: Agree with FCG. (Smith)

TECO: Agree with FCG.

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKELAND: Agree with FCG.

FICA: No position.

FGT: Yes.

DADE: No position.

ISSUE 5: Is the FCG's long range planning study reasonably consistent with the individual utilities' long-range planning studies?

POSITIONS

STAFF: Yes. Although the FCG's study is not exactly consistent with the individual utilities' studies there is not sufficient cause to reject FCG's study. The differences between the FCG's study and the individual utilities' studies can be considered reasonable.

FCG: Yes. The timing of unit additions and the types of generation added are reasonably consistent between the FCG study and the aggregate utility plans.

FPC: Agree with FCG.

FPL: Agree with FCG. (Smith)

TECO: Agree with FCG. (Ramil)

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKELAND: Agree with FCG.

FICA: Yes. (Seidman)

FGT: Yes.

DADE: Yes.

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ISSUE 6: Is the FCG's avoided unit study reasonably consistent with the individual utilities' avoided unit studies?

POSITIONS

STAFF: Yes. Although the FCG's study is not exactly consistent with the individual utilities' studies, there is not sufficient cause to reject the studies. The differences between the FCG's study and the individual utilities' studies can be considered reasonable.

FCG: Yes.

FPC: Yes.

FPL: Yes. (Smith)

TECO: Yes.

SEC: Yes.

JEA: Yes.

OUC, TALLAH, LAKE LAND: Yes.

FICA: Yes.

FGT: No position.

DADE: Yes.

ISSUE 7: Should Florida Public Utilities Company (FPUC) be allowed to continue to offer avoided capacity payments equal to 100 percent of its avoided demand cost from FPUC's wholesale supplier if and when capacity delivered by QF's results in a reduction of FPUC's monthly billing demand?

POSITIONS

STAFF: Yes.

FCG: No position.

FPC: No position.

FPL: No position.

TECO: No position.

SEC: No position.

JEA: No position.

OUC, TALLAH, LAKE LAND: No position.

FICA: No position.

FGT: No position.

DADE: No position.

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ISSUE 8: Should FPUC pay QF's an avoided energy cost equal to the monthly average fuel cost billed by FPUC by its supplier in each division?

POSITIONS

STAFF: Yes.

FCG: No position.

FPC: No position.

FPL: No position.

TECO: No position.

SEC: No position.

JEA: No position.

OUC, LAKELAND, TALLAH: No position.

FICA: No position.

FGT: No position.

DADE: No position.

ISSUE 9: Is the FCG's assumption that natural gas will be available in the amounts required in the Planning Studies reasonable?

POSITIONS

STAFF: Yes.

FCG: Yes. The studies assume that 600 million cubic feet per day of natural gas will be available to the electric utility industry in Florida. This is based on the planned Phase II expansion of the Florida Gas Transmission pipeline into the state.

FPC: Yes.

FPL: Yes. (Smith)

TECO: Agree with FCG.

SEC: Agree with FCG.

JEA: Agree with FCG.

OUC, TALLAH, LAKELAND: Agree with FCG.

FICA: No position.

FGT: The assumption made as to the availability of natural gas for the FCG studies is reasonable for planning purposes.

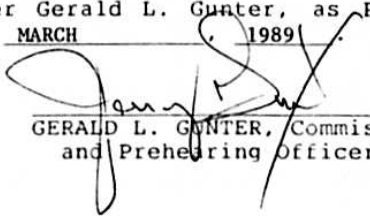
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DADE: No position.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that these proceedings shall be governed by this order unless modified by the Commission.

By ORDER of Commissioner Gerald L. Gunter, as Prehearing Officer, this 3rd day of MARCH, 1989.



GERALD L. GUNTER, Commissioner
and Prehearing Officer

(S E A L)

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