

Florida Power

CORPORATION
Gerald A. Williams
CORPORATE COUNSEL

February 11, 1994

Mr. Steven C. Tribble, Director
Division of Records and Reporting
Florida Public Service Commission
101 East Gaines Street
Tallahassee, Florida 32399-0870

Re: Petition of Florida Power Corporation to Open
Investigation into Tampa Electric Company's
Proposed Construction of a 69 kV Transmission Line
to Serve Cities of Wauchula & Ft. Meade
Docket No. 930676-EI

Dear Mr. Tribble:

Enclosed for filing is an original and fifteen copies of
rebuttal testimony of Samuel F. Nixon, Jr., Dr. Robert B. Parente,
Jeffrey Pollock and Donald R. Stillwagon and a Certificate of
Service.

Please acknowledge your receipt of the above filings on the
enclosed copy of this letter and return to the undersigned. Thank
you for your assistance.

Very truly yours,

FLORIDA POWER CORPORATION

Gerald A. Williams
Gerald A. Williams
Corporate Counsel

GAW/kma
Enclosure

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FPSC-BUREAU OF RECORDS

DOCUMENT FILED DATE

01457 FEB 14 1994

CERTIFICATE OF SERVICE

DOCKET NO. 930676-EI

I HEREBY CERTIFY that I have served a true copy of Florida Power Corporation's Rebuttal Testimony of Samuel F. Nixon, Jr., Dr. Robert B. Parente, Jeffry Pollock and Donald R. Stillwagon by first class mail postage prepaid today, February 10, 1994 to the persons listed below. *** Indicates service by Federal Express

Lee L. Willis, Esq.***
James D. Beasley, Esq.***
Ausley, McMullen, McGehee,
Carothers and Proctor
P. O. Box 391
Tallahassee, FL 32302

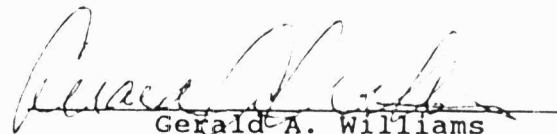
J. Roger Howe
Office of Public Counsel
111 West Madison
Suite 812
Tallahassee, FL 32301

Martha Carter Brown, Esq.***
Legal Department
Florida Public Service Commission
101 East Gaines Street
Tallahassee, FL 32301

Frederick M. Bryant, Esq.
Moore, Williams, Bryant,
Peebles & Gautier, P.A.
P. O. Box 1169
Tallahassee, FL 32302

Ms. Mavis F. Best
City Clerk
City of Wauchula
P. O. Box 818
Wauchula, FL 33873

Mr. Charles C. Saddler, III
City Manager
City of Fort Meade
P. O. Box 856
Fort Meade, FL 33841


Gerald A. Williams

Before the
Florida Public Service Commission

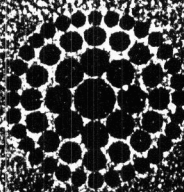
In re: Petition of Florida Power
Corporation to Open Investigation
into Tampa Electric Company's
Proposed Construction of a 69 kV
Transmission Line to Serve the
Cities of Wauchula and Fort Meade.

Docket No. 930676-E1

Filed: February 14, 1994

ORIGINAL
FILE COPY

REBUTTAL TESTIMONY
AND
EXHIBITS



Florida
Power
& Light

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REBUTTAL TESTIMONY
OF
SAMUEL F. NIXON, JR.

FLORIDA POWER CORPORATION

DOCKET NO. 930676-El

REBUTTAL TESTIMONY OF
SAMUEL F. NIXON, JR.

1 Q. State your name.

2 A. My name is Samuel F. Nixon, Jr.

3

4 Q. Are you the same Samuel Nixon who filed Direct Testimony in these
5 proceedings?

6 A. Yes.

7

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

9 A. My testimony will address seven specific issues raised in the prefled
10 testimony of TECO and the cities of Ft. Meade and Wauchula.

11 -First, I will respond to TECO's incorrect and inappropriate speculation
12 about Florida Power's motives for initiating these proceedings.

13 -Second, I will address the real focus of these proceedings: the
14 application of the Grid Law.

15 -Third, I will address the relevance of TECO's arguments about the
16 impact of TECO's offer to construct additional transmission facilities on
17 its securing contracts to supply power to the Cities of Fort Meade and
18 Wauchula.

1 -Fourth, I will respond to TECO's suggestion that utility commitments
2 (specifically Florida Power's) to make their transmission systems
3 available for use by others are insincere.

4 -Fifth, I will explain why the "transmission dependent utility" argument
5 of TECO and the cities is irrelevant and inaccurate.

6 -Sixth, I will address TECO's misinterpretation of a letter from Florida
7 Power to the City of Fort Meade concerning Florida Power's system
8 planning as it relates to transmission service to the cities.

9 -Seventh, and finally, I will explain why TECO's discussion of the Saint
10 Cloud issue is incorrect and inapt.

11
12 Q. Are you sponsoring any exhibits to your rebuttal testimony?

13 A. Yes. I am sponsoring Exhibit ____ (SFN-1), a copy of which is attached
14 to my prefiled rebuttal testimony.

15
16 Q. How specifically do you take issue with Mr. Ramil's testimony
17 concerning Florida Power's motives for initiating these proceedings?

18 A. Ever since Florida Power initiated these proceedings, TECO has
19 attempted to distract the Commission from its investigation of the
20 proposed TECO transmission project by making allegations about Florida
21 Power using this case to "retaliate" against TECO for winning the
22 competition to provide wholesale power to the two cities. As I
23 explained in my direct testimony, this case actually concerns only
24 transmission issues. Florida Power recognizes that TECO has valid

1 wholesale contracts to provide bulk power to the cities. Florida Power
2 believes that TECO can and should continue to serve the cities under
3 these contracts, but should do so in compliance with the Grid Law.
4 This will, we believe, prevent real economic harm to the retail customers
5 of both utilities. The testimony we have filed in this proceeding even
6 demonstrates that the rates the cities will pay to TECO for bulk power
7 will be lower if TECO does not build unneeded facilities.

8
9 Florida Power believes the Commission's decision in this case will
10 provide valuable and necessary guidance to all utilities regarding the
11 application of the Grid Law in circumstances such as these.

12
13 Q. Please state your understanding of the transmission issues that should
14 serve as the focus of these proceedings.

15 A. When there exists an adequate and reliable third party path that has
16 been and will continue to be available for transmission service, this
17 Commission should apply the provisions of the Grid Law to prevent the
18 construction of a redundant transmission facility when that construction
19 would impose net costs that are substantially higher than those that
20 would accrue through the use of a third party transmission system.

21
22 In this case, Florida Power owns the "adequate and reliable"
23 transmission facilities. The total cost differential between using those
24 transmission facilities or constructing duplicate transmission facilities

1 approaches a factor of ten. Such a vast differential makes the
2 uneconomic duplication self-evidently clear. In fact, TECO's testimony
3 concedes that their plan and their preference would have been to use
4 Florida Power's transmission facilities and that such use would have
5 substantially reduced the total cost involved in serving the cities. (See
6 Testimony of John B. Ramil at pages 21, line 9 and page 10, line 25.)
7 TECO's claims only that because of the desires of the two cities, TECO
8 was unable to use the Florida Power and still win the business.

9
10 Q. How do you respond to TECO's testimony that the new transmission
11 facilities are "necessary" because construction was required for TECO
12 to win the contracts with the cities?

13 A. Whatever the line's importance in the negotiations, the fact is that
14 TECO and the cities now have a contract for the sale and purchase of
15 bulk power and Florida Power does not challenge the validity of those
16 contracts. Florida Power simply believes the Commission should avoid
17 uneconomic duplication of transmission facilities as prescribed by the
18 Grid Law.

19
20 Q. What conclusions can we draw about the weight that construction of
21 the proposed transmission facilities had on the negotiations?

22 A. We can essentially rule out that any reliability problems with Florida
23 Power's existing facility were a material factor in the negotiations. This
24 is so for several reasons. First, it is clear from our evidence, and it is

1 unchallenged by TECO and the cities, that reliability comparable to that
2 of Florida Power's transmission facilities was the standard prescribed,
3 at least by Fort Meade, from the beginning of the bid solicitation.
4 Second, the direct testimony of the two witnesses from the cities
5 contains no significant criticism of any aspect of Florida Power's
6 transmission reliability. Third, TECO, as Mr. Ramil himself testifies, was
7 perfectly willing to provide service through Florida Power's transmission
8 facilities. TECO would not have been willing to do this had it had any
9 reliability concerns about Florida Power's facilities. This conclusion is
10 reinforced by the fact that coordinated system planning practices among
11 utilities in Florida gives them early and ample opportunity to make
12 known to us any such concerns. They have done so on other occasions,
13 as have we. We have received no complaints regarding the service
14 reliability of Florida Power's existing transmission facilities referred to in
15 this case since TECO began using them to provide transmission service
16 to Wauchula in 1991.

17
18 The next conclusion we can draw relates the construction of the new
19 facilities and their costs. First, it is important to observe that the
20 proposed transmission facilities' costs are not to be assigned directly to
21 the cities. Second, the proposed TECO transmission facilities'
22 construction represented a principal basis upon which TECO was willing
23 to forego charging the cities for transmission services, beginning in
24 1995. Therefore, the contracts relieve the cities from responsibility for

1 direct payment for the critical and last link in the facilities with which
2 TECO plans to serve them, whether or not any such new facilities are
3 built and in service by that time. Additionally, neither TECO nor the
4 cities have alleged that their contracts will fail if the Commission orders
5 TECO not to build the duplicate facilities.
6

7 Q. Is there any objective reason the cities could not continue to be served
8 by TECO, if the Commission orders TECO not to build the proposed
9 transmission facilities?

10 A. No. There is no reason TECO could not continue to serve the cities. In
11 fact, the cities could continue to be served by TECO at somewhat
12 cheaper costs than if the facilities were constructed. This is primarily
13 because TECO can still relieve the cities from paying transmission
14 service costs and recover those costs from its entire customer base as
15 it would any other transmission cost reasonable and necessary for
16 providing service. As explained further in Mr. Pollock's testimony, this
17 would even result in slightly lower rates for the cities. TECO's full
18 recovery of its transmission service costs means that the cities, TECO
19 and TECO's shareholders should all benefit from TECO continuing to
20 serve the cities, even if the duplicate transmission facilities are not built.
21

22 Q. What about the cities' allegations that they are harmed economically,
23 since by not having two transmission lines they do not benefit from the
24 competition between Florida Power and TECO?

1 A. This is all part of the cities' unwarranted apprehensions regarding their
2 transmission dependent status which I have mentioned and will discuss
3 in more detail later in my testimony. I will observe at this point,
4 however, that even if the cities did have valid concerns in this regard,
5 the term of their contract with TECO is so long that the next
6 opportunity they would have to use this hypothetical increase in their
7 negotiating power would be two decades from now, assuming the
8 electric utility industry as we know it still exists.

9
10 Q. How do the circumstances surrounding Fort Meade's and Wauchula's
11 efforts to secure new power supply agreements contravene the notion
12 that they suffer as a result of being transmission dependent utilities?

13 A. Mr. Ramil's testimony demonstrates that the City of Fort Meade
14 received five bids that it deemed competitive. Furthermore, the City of
15 Ft. Meade concedes having received three which were extremely
16 competitive. If Florida Power Corporation had any ability to wield market
17 power to limit Ft. Meade's options, which it does not, it is abundantly
18 clear that it was not exercised. In fact, a bid that came from FMPA was
19 initially assessed as the most economic. Ultimately, after TECO made
20 cost concessions related to the proposed duplicate transmission
21 facilities, its bid was accepted. These circumstances show that Florida
22 Power Corporation had no excessive market power which worked to the
23 detriment of the cities.

1 I would also note that neither TECO nor the cities have presented
2 testimony (nor could there be any) to demonstrate that Florida Power
3 Corporation's power supply contracts vary substantially between
4 transmission dependent and non-transmission dependent utilities.
5

6 Q. Mr. Saddler states that "Tampa Electric's direct transmission service will
7 bring additional competitive sources to the City Gates" (at page 5). Is
8 that statement accurate?

9 A. I believe it is not accurate. Florida Power has adequate transmission
10 capacity and is legally committed to make that capacity available to sell
11 power to Fort Meade and Wauchula or to deliver competitive sources of
12 power to them, from TECO or another power supplier. The proposed
13 TECO facilities would not make potential power suppliers more
14 competitive. They would merely duplicate facilities already available.
15

16 Q. How is Florida Power legally committed to deliver the cities' power
17 purchased from another utility over Florida Power's transmission
18 system?

19 A. The Company is legally committed to provide transmission service by
20 Florida Power's transmission tariff, which is in effect as a rate schedule
21 under the Federal Power Act (see Exhibit ____ SFN-1). Also,
22 independent of the tariff, the cities have rights to transmission service
23 under Section 211 and 212 of the Federal Power Act.

1 Q. Please briefly describe Florida Power's transmission tariff.

2 A. The tariff sets out the terms and conditions under which Florida Power
3 is committed to provide transmission service and the charges. Both the
4 terms and conditions and the charges are subject to review by FERC to
5 ensure that they are just and reasonable. The tariff, as a filed rate
6 schedule under the Federal Power Act, has the force and effect of a
7 statute and binds the Company to its term. Florida Power consequently
8 has a legal obligation to provide the service offered in the tariff under
9 the charges, terms and conditions it contains.

10
11 Q. Please describe the cities' right to transmission service under the tariff.

12 A. The tariff provides that both firm and non-firm transmission service are
13 available to "municipal electric utilities", among other types of utilities,
14 for "all types of capacity and energy from sources to which the
15 Company is directly or indirectly electrically interconnected over the
16 facilities of the Company" (Articles I and II). The service is "to or from
17 existing points of delivery and such other points as may be established
18 on the Company's interconnected system" (Article I).

19
20 The service is offered "where and as long as facilities have adequate
21 capacity to permit the transmission requested by the Customer on a
22 technically feasible basis" (Article I). If the requested service would
23 require new facilities, or would cause Florida Power to install facilities
24 earlier than otherwise would be the case, or otherwise would cause it

1 to incur exceptional expense, Florida Power must offer the service
2 "under a compensatory contract or rate schedule subject to the approval
3 to the Federal Energy Regulation Commission" (Article I).

4
5 As municipal electric utilities which have interconnections with Florida
6 Power's transmission system as existing points of delivery, the cities
7 have the right under the tariff to transmission service for "all types of
8 capacity and energy from sources to which the Company is directly or
9 indirectly interconnected" (Article II). Florida Power is interconnected
10 to TECO, among other Florida utilities. Thus, the cities have the right
11 under the tariff to transmission for power supplied by TECO or any other
12 supplier with which Florida Power has adequate direct or indirect
13 interconnections. TECO has a like right to have its power delivered to
14 the cities, if it chooses to be the transmission customer.

15
16 The tariff rates are based on the average embedded costs of Florida
17 Power's transmission system. The tariff preserves Florida Power's right
18 to offer service under a special contract at higher rates than those set
19 out in the tariff, but only if the service would cause Florida Power to
20 incur exceptional expense. The delivery of power from TECO to the
21 cities would not cause Florida Power to incur any such exceptional
22 expense.

1 Q. Has Florida Power ever refused a request for transmission service under
2 the tariff since the tariff became effective in the early 1970's.

3 A. Yes, but only when there were constrained facilities preventing Florida
4 Power from providing the service requested. There are no such
5 constraints for delivery of TECO's power to the cities.

6
7 Q. If Florida Power were to turn down a request by the cities for
8 transmission service under the tariff, would they have remedies to
9 obtain the services, based on the Federal Power Act?

10 A. Yes, they certainly would. They could file complaints with FERC
11 requesting FERC to order Florida Power to comply with the terms of its
12 tariff. Since, as stated earlier, the tariff has the force and effect of a
13 statute, it binds Florida Power to its terms.

14
15 Q. Do the cities have rights under the Federal Power Act to seek
16 transmission service other than by enforcing the terms of Florida
17 Power's tariff?

18 A. Yes. Sections 211 and 212 of the Federal Power Act, as implemented
19 by FERC in rulemakings, require a party seeking transmission service
20 first to make a good faith request. The recipient of the request must
21 then supply a good faith answer. If the recipient can provide service
22 from existing capacity, the answer must include an executable service
23 agreement. If it cannot supply service from existing capacity, the
24 recipient must identify any constraints and offer an executable study

1 agreement to evaluate the cost of alleviating those constraints. After
2 such an exchange, the requesting party may choose either to enter into
3 the study agreement or to file a request for a transmission order with
4 FERC.

5
6 Q. Can you explain why Florida utilities need guidance from the
7 Commission with respect to transmission issues related to wholesale
8 power supply?

9 A. Yes. Florida Power initiated these proceedings under the provisions of
10 the Grid Law, which, interestingly, TECO's Direct Testimony never
11 mentions. Mr. Ramil's testimony essentially urges upon this Commission
12 the standard that, so long as net benefits exceed net costs, then the
13 construction of unnecessary facilities should be allowed as justifiable in
14 an economic sense. That standard is inconsistent with the stated
15 purpose of the Grid Law. Therefore, utilities need guidance regarding
16 the Commission's expectations concerning the development of
17 wholesale business when such development affects the interests of
18 retail customers. Florida Power believes that electrically unneeded
19 duplication makes no sense, even if it is argued that a business
20 transaction involving substantial investment would not take place
21 without such duplication. If the Commission disagrees with us and
22 agrees with TECO, however, it is important for us to know that, so all
23 utilities in Florida operate under a common set of ground rules. The
24 reason we need this guidance now is to avoid situations where

1 expensive competition occurs under ratemaking assumptions that are
2 later declared to be invalid.

3
4 Essentially, our position is that if retail rate cases were the proper
5 means for addressing issues such as the one now before the
6 Commission, there would never have been any need for a Grid Law. To
7 give any real meaning to the Grid Law, it must operate not to
8 retroactively mitigate impacts of unnecessary duplicative costs for
9 ratemaking purposes, but to avoid uneconomic duplication by preventing
10 unnecessary expenditure of those costs before the economies are lost.
11 Once the facilities are built, whoever must ultimately pay for them,
12 economic waste has occurred. Florida Power's overriding purpose in this
13 docket is merely to obtain guidance for conducting utility business that
14 will avoid the kind of waste the Grid Law was designed to address.
15 TECO's argument that Commission review of its proposed project is
16 premature, is rooted in traditional ratemaking concepts and
17 conveniently ignores the Grid Law.

18
19 Q. How do you respond to Mr. Ramil's statement at Page 17 of his
20 testimony that "all utilities with transmission market power have to say
21 that" in response to the question addressing Florida Power's
22 commitment to allow its transmission facilities to be used to deliver
23 power from other suppliers?

1 A. Based upon the question to which he responded, Mr. Ramil implied that
2 a potential increase in Florida Power's wholesale power rates might
3 justify the cities' apprehensions about Florida Power providing
4 transmission access to other potential power suppliers for the cities.
5 Bulk power sales and transmission charges are separate issues. As I
6 have explained earlier, unlike TECO which has no such tariff, Florida
7 Power's T-1 Tariff imposes upon it the legal obligation to provide
8 transmission service. Consequently, Mr. Ramil's statement that the
9 circumstances provided grounds for the cities to be insecure is without
10 basis.

11

12 Q. On Page 17 of his Direct Testimony, Mr. Ramil argues that Florida
13 Power's November 14, 1993, letter to Mr. Smith conveys to the cities
14 a message that they should have concerns about the availability of
15 transmission services if they were not long term Florida Power bulk
16 power customers. Is that an accurate interpretation of that letter?

17 A. No. Presumably Mr. Ramil refers to the top of page 2 of Mr. Richard
18 David's letter. Mr. David is merely referring to a wide breadth of
19 services that are available to all-requirements customers. Mr. David only
20 says that if they are not all-requirements customers, then the full range
21 of planning and services would not be available to them.

1 TECO's use of this letter out of context belies the long history of
2 commitment to open access transmission that this company has
3 demonstrated.
4

5 Q. On Page 4 of his Testimony, Mr. Ramil says that Florida Power's
6 institution of proceedings before FERC last December shows an attempt
7 to use regulatory authority as a weapon in the wholesale power market.
8 Is that an adequate characterization of Florida Power's intentions in that
9 proceeding?

10 A No. It is completely inaccurate. No loss of wholesale business by Florida
11 Power led to the institution of FERC proceedings. The proceedings we
12 filed in December of 1993 with FERC concerned attempts by the City
13 of St. Cloud to transfer certain benefits under an agreement we made
14 with them. It is a simple contract dispute between Florida Power and
15 St. Cloud. TECO is involved because it happened to be the utility which
16 agreed to repurchase from St. Cloud a portion of the capacity which St.
17 Cloud is under contract to purchase from Florida Power. Florida Power
18 would have brought this action at FERC, regardless of who had agreed
19 to repurchase power from St. Cloud. We have asked FERC for a
20 declaratory order on the terms and conditions of that contract. The
21 case has nothing to do with limiting another entity's access to bulk
22 power.

23 Q. Does this conclude your testimony?

24 A. Yes.

EXHIBITS

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 30
Effective: November 6, 1992
Cancels Original Sheet No. 30

FLORIDA POWER CORPORATION
TRANSMISSION SERVICE RESALE RATE SCHEDULE T-1

I. Availability

Service hereunder is available over the Company's facilities to or from existing points of delivery and such other points as may be established on the Company's interconnected system. Firm and non-firm transmission service is available where and so long as facilities have adequate capacity to permit the transmission requested by the Customer on a technically feasible basis.

If the requested transmission service would require the Company to install new facilities, would cause it to install facilities significantly earlier than it otherwise would do, or would otherwise cause it to incur exceptional expense, the Company reserves the right to decline to serve under this rate schedule and shall offer transmission service under a compensatory contract or rate schedule subject to approval of the Federal Energy Regulatory Commission (or such other regulatory agency as may have jurisdiction to the premises). Such compensatory contract or rate schedule would, to the extent appropriate in the circumstances, follow the provisions of this transmission service rate schedule and its associated terms and conditions.

If the requested transmission service involves transmission directly or indirectly on the facilities of a third utility system, the Customer will make arrangements for use of those

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 31
Effective: November 6, 1992
Cancels Original Sheet No. 31

facilities directly with that third system, and the Company shall not be obliged to commence transmission service until such arrangements have been made.

II. Applicability

This rate schedule shall apply to the transmission for any rural electric cooperative, municipal electric utilities or other electric utilities of all types of capacity and energy from sources with which the Company is directly or indirectly electrically interconnected to the Customer's system over facilities of the Company and to the transmission for any qualifying facilities and independent power producers of all types of capacity and energy over facilities of the Company to rural electric cooperatives, municipal electric utilities or other electric utilities directly or indirectly electrically interconnected to the Company's facilities. The service under this rate schedule is 60 cycle alternating current of the phase and Company standard nominal voltage desired by the Customer at the above described delivery points, provided electric service of the voltage desired by the Customer is available generally in the area in which such service is desired.

III. Monthly Rates

Service rendered hereunder shall be billed at the aggregate of the charges set forth

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

Second Revised Sheet No. 32
Effective: February 23, 1993
Cancels First Revised Sheet No. 32

below for the delivery point(s) specified in the Service Agreement:

A. Charges for Transmission Service

- (1) Charge for Firm Transmission Service. The following charges shall be applicable to all Firm Transmission Service:

Monthly Rate:	\$1.16	per kW-Month
Daily Rate:	\$0.038	per kW-Day
Hourly Rate:	\$0.00255	per kWh

- (2) Charge for Non-Firm Transmission Service. A charge of \$.00159 per KWH shall be applicable to all Non-Firm Transmission Service.

B. Additional Charges for Distribution Service.

- (1) Charge for Firm Distribution Service. The following additional charge shall be applicable to Firm Transmission Service for Distribution Facility delivery points:

Monthly Rate:	\$0.63	per KW
Daily Rate:	\$0.021	per KW-Day
Hourly Rate:	\$0.00150	per KWH

- (2) Charge for Non-Firm Distribution Service. The additional charge of \$.00086 per KWH shall be applicable to all Non-Firm Transmission Service for Distribution Facility delivery points.

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 33
Effective: November 6, 1992
Cancels Original Sheet No. 33

C. Interruptions of Firm Transmission Service. If, because of constraints on the Company's transmission system, firm transmission service cannot be delivered at the level anticipated in the Service Agreement for more than two consecutive hours in any day, then the charge for that day shall be adjusted to the lowest level of service rendered during the period of constraint; and the bill for the remainder of the month shall be computed under the above daily rate.

D. Definitions

- (1) Transmission System: For purposes of this tariff, the Company's Transmission System shall be deemed to consist of all transmission facilities operating at voltages of 69 KV and above.
- (2) Distribution Facilities: Distribution facilities consist of all distribution facilities operating at voltages of less than 69 KV.
- (3) Firm Transmission Service: Firm transmission service is defined as that type of transmission service which is requested and supplied on a continuous availability basis similar to service provided under the All Requirements Resale Service Rate Schedule RS-2.
- (4) Non-Firm Transmission Service: Non-firm transmission service is defined as that type of transmission service which is requested and is supplied on a when, as and if available basis and which is interruptible

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 34
Effective: November 6, 1992
Cancels Original Sheet No. 34

at the sole option of the Company. The Company will endeavor to give as much notice of interruption as practicable. In the event the Customer fails to interrupt or curtail its use of Non-Firm Transmission Service within one hour upon notification to do so by the Company, then such service shall be considered as Firm Transmission Service and billed as such by the Company for the current and succeeding eleven billing months. Non-Firm Transmission Service is available at hours specified by the Company. Non-firm Service is not available for transmission of firm power.

IV. Billing Determinants for Firm Transmission Service

A. The kW demands, for commitment periods of a month or greater, to be used during the term of the transmission service agreement for billing of each firm transmission service commitment shall be either:

- (1) If transmitted power and energy hereunder represents the Customer's total system power requirements at the delivery point(s), the billing demand shall be the maximum measured 60-minute integrated KW demand established during the current billing period, but not less than the maximum such demand established at the delivery point(s) during

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 35
Effective: November 6, 1992
Cancels Original Sheet No. 35

the twelve months ended with the current billing period nor less than the contract demand.

or

- (2) If transmitted power and energy hereunder represents less than the Customer's total system power requirements at the delivery point(s), the billing demand shall be the maximum hourly KW demand scheduled to be delivered during the commitment period but not less than the contract demand.

B. The kW demands, for commitment periods of less than a month but greater than 12 hours, to be used during the term of the transmission service agreement for billing of each daily firm transmission service commitment shall be the greater of:

- (1) The maximum hourly kW demand scheduled to be delivered during the daily commitment period

or

- (2) The contract demand.

C. The energy quantity, for commitment periods of 12 hours or less, to be used during the term of the transmission service agreement for billing each firm transmission

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 36
Effective: November 6, 1992
Cancels Original Sheet No. 36

service commitment shall be determined based on an hourly dispatch schedule as mutually agreed to between the Company and Customers.

V. Billing Determinants for Non-Firm Transmission Service

The energy quantity to be used for billing Non-Firm Transmission Service shall be determined based on an hourly dispatch schedule as mutually agreed to between the Company and Customers.

VI. Scheduling of Transmitted Power and Energy

It shall be the responsibility of the Customer to arrange a satisfactory schedule for transmitted power and energy and to notify Company of such schedule prior to commencement of the transaction. Where practicable, the Customer shall furnish the Company a 24-hour schedule by 3:00 p.m. of the prior day. The amount scheduled to be delivered will be rounded to the nearest whole MWH for dispatching purposes only. The difference between the scheduled deliveries to the Customer and the actual deliveries shall be classed as inadvertent energy. Inadvertent energy shall be returned in kind (on-peak or off-peak), as defined by North American Power Systems Interconnection Committee (NAPSIC) or its successor at times mutually agreed upon.

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 37
Effective: November 6, 1992
Cancels Original Sheet No. 37

VII. Losses

Billing hereunder shall be subject to an additional charge if power and energy losses are to be furnished from the Company's generation system. Loss quantities and charges to be applied shall be mutually agreed upon between the parties prior to the commencement of the transmission service transaction.

VIII. Power Factor

It shall be the responsibility of the Customer receiving transmission services to supply enough reactive power to maintain the power factor of transmitted power as near unity as practicable. In the event a minimum power factor of 97% is not maintained, monthly billing hereunder may be subject to an additional charge equal to 6.3 cents per KVAR for the KVAR's necessary to correct the power factor of the wheeled power to such required minimum. Such charge shall be based on the maximum such KVAR requirements established during the 12-month period ending with the current billing month.

IX. General Terms and Conditions

Service under this Transmission Service Rate Schedule is subject to the General Terms and Conditions applicable to transmission service as the same may be in effect from time to time pursuant to the filing and other provisions of the Federal Power Act.

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 38
Effective: November 6, 1992
Cancels Original Sheet No. 38

GENERAL TERMS AND CONDITIONS
FOR THE PURCHASE OF TRANSMISSION SERVICE
RESALE RATE SCHEDULE T-1

ARTICLE 1. Obligations of Company and Customers

The Company will offer to the Customers the service described in the Transmission Service Resale Rate Schedule T-1. Acceptance of such service by the Customer binds the Customer to all provisions of the transmission service resale rate schedule and associated general terms and conditions, including those regarding payment, as they may be in effect from time to time.

Prior to commencement of service, a service agreement shall be executed between the Customer and the Company. The service agreement shall conform with the sample agreement and supplements thereto contained in the Company's FERC Electric Tariff, Second Revised Volume No. 1, as the same may be in effect from time to time pursuant to the filing and other provisions of the Federal Power Act.

All obligations of the Company and the Customer are subject to action of the Federal Energy Regulatory Commission (or such other regulatory agency as may have jurisdiction in the premises).

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 39
Effective: November 6, 1992
Cancels Original Sheet No. 39

ARTICLE 2. Exchange of Information

The Company and Customer will keep each other currently informed of plans for transmission services and facilities which would affect the planning of the other. The Company will advise the Customer of whether and how the Customer's transmission plans or transmission service plans can be accommodated within the Company's transmission plans at the least cost to both parties. In the event that the Company, pursuant to the first paragraph of the Availability Clause of the Transmission Service Resale Rate Schedule T-1, declines to offer transmission service under a contract or other rate schedule or under the second paragraph of that clause declines to offer service under this rate schedule, the Company will furnish a detailed explanation accompanied by relevant transmission flow charts.

ARTICLE 3. Termination of Service

Unless other provision for termination of service is made in a service agreement, service may be terminated as follows:

- a. If transmission service is for an unspecified, open-ended period, either party may terminate the service agreement or service under the transmission service rate schedule by giving two years written notice.

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 40
Effective: November 6, 1992
Cancels Original Sheet No. 40

b. If transmission service is for a specified period of more than four years, the Customer may terminate the service agreement or service under the transmission service rate schedule prior to the end of the specified period by giving two years' written notice.

c. If transmission service is for a specified period of four years or less, the Customer may terminate the service agreement or service under the transmission service rate schedule prior to the end of the specified period by giving three months' written notice.

d. If transmission service is for a specified period of three months or less, the Customer may terminate the service agreement or service under the transmission rate schedule prior to the end of the specified period by giving one week's oral notice, with confirming written notice mailed on the same day.

e. If the Company builds special facilities to render the transmission service pursuant to an agreement between the Company and the Customer, the Customer, regardless of any other provision of this Article 3, shall not terminate the service agreement or service under the transmission service rate schedule without paying the Company for the undepreciated balance, less salvage, of the Company's investment in the special facilities.

f. The provisions of this Article 3 shall apply separately to each transmission transaction under a transmission service agreement or the transmission rate schedule if there is more than one such transmission transaction.

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 41
Effective: November 6, 1992
Cancels Original Sheet No. 41

ARTICLE 4. Changes in Tariff

The provisions of this transmission service rate schedule and associated terms and conditions may be amended from time to time or superseded by the Company by notifying the Customer in writing of such change and making the appropriate filing with the Federal Energy Regulatory Commission (or such other regulatory agency as may have jurisdiction in the premises); provided, however, no such filing (unless agreed to by the Customer in writing) will be made without giving the Customer at least sixty (60) days written notice of the filing.

ARTICLE 5. Service Facilities and Metering

a. The Company and the Customer each will furnish, install, maintain, own and operate at its sole cost and expense, all lands and equipment located on its side of the delivery point(s) unless otherwise specified in the service agreement.

b. Where practicable, the electric service demand and energy shall be measured by metering equipment to be furnished and installed by the Company at or adjacent to said point of delivery, which metering equipment shall constitute the basis of computation of bills for demand and energy consumption. The Customer likewise may provide similar metering equipment as check meters for measuring demand and energy contracted for herein at the said point of delivery.

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 42
Effective: November 6, 1992
Cancels Original Sheet No. 42

c. Where it is impracticable to meter services rendered under the Transmission Service Tariff, a mutually agreed upon schedule of quantities delivered shall constitute the basis of computation of bills for demand and energy consumption.

d. The Customer, upon notice to the Company, shall have the right in the presence of an officer, agent or designated employee of the Company, to read and check the Company's meters and/or metering equipment, should it so desire, and should there be any disagreement as to the correctness of the readings and/or accuracy of the said meters and/or metering equipment, the parties hereto shall jointly test said meters. In the event of disagreement as to tests and/or accuracy of same, the parties hereto shall have the right to have the said meters and metering equipment tested by a competent and impartial engineer mutually acceptable to the parties hereto, and the decision of said engineer shall be considered final as to the accuracy of the said meters and/or metering equipment, but it is hereby stipulated that the said meters and metering equipment shall be considered accurate provided calibration is within two (2) percent, fast or slow, of accuracy. Should either or both of said meters be beyond the said range of accuracy, an adjustment shall be made for the period of known inaccuracy, based on the average of the three (3) months' consumption prior to the period in question, but no adjustment shall extend over a period of more than three (3) months.

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 43
Effective: November 6, 1992
Cancels Original Sheet No. 43

ARTICLE 6. Access for Company Employees

Unless covered in a separate interchange agreement, the Company will have the right, authority and privilege to enter upon the premises of the Customer at all reasonable times for the purposes of reading meters, inspecting or repairing apparatus used in connection with the service, removing its property and/or for any other purposes to carry on the work of the Company in connection with the delivery of energy herein provided for, and to do all things necessary and expedient in the proper operation of its said business, but in exercising its said right and privilege, the Company shall assume all liability for damage or personal injury caused by the negligence of the Company.

ARTICLE 7. Use of Service

The Customer and the Company will cooperate in obtaining the most efficient use of their facilities and will avoid, insofar as practicable, the imposition of low power factor or widely fluctuating loads or unbalanced loads.

ARTICLE 8. Payment of Bills

Bills for service shall be rendered monthly by Company and shall be due when rendered and payable within ten (10) days from date of bill. Bills not paid within ten (10) days from the date of bill shall be deemed delinquent and shall accrue interest at the current annual rate provided for refunds made under the Federal Power Act by the Federal Energy

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 44
Effective: November 6, 1992
Cancels Original Sheet No. 44

Regulatory Commission or any successor agency. In the absence of such an interest rate, interest will accrue at the rate of one (1) percent per month. In the case of a disputed bill, payment of the disputed portion either (1) may be made by the Customer to the Company during the ten (10) day payment period, in which case, any portion finally determined not to be owing will be refunded by the Company with interest computed as set out above for the period after the ten (10) day payment period, or (2) may be withheld by the Customer until the dispute is finally resolved, in which case, the Customer will pay the amount finally determined to be owing with interest computed as set out above the period after the ten (10) day payment period.

In the event of non-payment of a bill by Customer, Company shall have the right to terminate service sixty (60) days subsequent to the date of the bill. Company shall be required to notify Customer in writing of its intent to terminate service for non-payment of bill at least thirty (30) days prior to the actual date of termination of service.

ARTICLE 9. Continuity of Service

The Company shall exercise due care and diligence to supply electric service hereunder free from interruption; provided, however, the Company shall not be responsible for any failure to supply electric service, nor for interruption, reversal or abnormal voltage of the supply, if such failure, interruption, reversal or abnormal voltage is without negligence on its part. Whenever the integrity of the Company's system or the supply of electricity is

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 45
Effective: November 6, 1992
Cancels Original Sheet No. 45

threatened by conditions on its system or on the systems with which it is directly or indirectly interconnected, or whenever it is necessary or desirable to aid in the restoration of service, the Company may in conformance with sound operating and engineering practices and with the application of standards no more interruptive than applied in service to its retail customers in like circumstances; curtail or interrupt electric service or reduce voltage to some or all of its Customers and such curtailment, interruption or reduction shall not constitute negligence by the Company.

ARTICLE 10. Liability

Each party hereto expressly agrees to indemnify and save harmless and defend the other against all claims, demands, costs or expense for loss, damage or injury to persons or property in any manner directly or indirectly connected with or growing out of, the generation, transmission or distribution of electric energy on its own side of the point of delivery hereunder, unless such claim or demand shall arise out of or result from the negligence or willful misconduct of the other party, its agents, servant or employees.

ARTICLE 11. Delivery Voltage

The delivery voltage at each point of delivery shall be that generally available in the area that service is desired; provided, however, where more than a single voltage is available the Customer shall have the right to select the delivery voltage.

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 46
Effective: November 6, 1992
Cancels Original Sheet No. 46

The Company and Customer shall maintain close coordination with respect to future delivery points in the interests of system reliability and overall economics. Each party will endeavor, to the extent practicable, to keep the other party advised of significant developments related to their respective power supply facilities.

ARTICLE 12. Permits and Easements

The customer shall furnish the Company with all permits and easements which are necessary for the construction and maintenance of the facilities required for delivery of service to the Customer's substation. The obligations of the Company and the Customer are subject to and conditioned upon their securing and retaining all permits and easements and other rights and approvals necessary for service to be rendered.

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 47
Effective: November 6, 1992
Cancels Original Sheet No. 47

FLORIDA POWER CORPORATION
SERVICE AGREEMENT FOR
TRANSMISSION SERVICE RESALE
RATE SCHEDULE T-1

Dated:

Parties: Florida Power Corporation
3201 - 34th Street South
Post Office Box 14042
St. Petersburg, Florida 33733
(The Company)

and

(The Customer)

1. Scope of Service Agreement

The Company agrees, subject to availability, to furnish transmission service to the Customer, and the Customer agrees to purchase and pay for such service. The terms on which the transmission service is offered and accepted are set out in the following exhibits:

- (a) Exhibit A. The applicable rate provisions for service under this Agreement are contained in the "Transmission Service Resale Rate Schedule T-1" in the Company's FERC Electric Tariff, Second Revised Volume No. 1 or as the same may be amended from time to time or superseded pursuant to the filing and other provisions of the Federal Power Act. The "Transmission Service

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 48
Effective: November 6, 1992
Cancels Original Sheet No. 48

Resale Rate Schedule T-1" in the tariff as in effect from time to time is hereby incorporated by reference and made a part of this Agreement as Exhibit A.

- (b) Exhibit B. The general terms and conditions of service under this Agreement as set out in the "General Terms and Conditions for the Purchase of Transmission Service Resale Rate Schedule T-1" in the Company's FERC Electric Tariff, Second Revised Volume No. 1 or as the same may be amended from time to time or superseded pursuant to the filing and other provisions of the Federal Power Act. The "General Terms and Conditions for the Purchase of Transmission Service Resale Rate Schedule T-1" in the tariff as in effect from time to time is hereby incorporated by reference and made a part of this Agreement as Exhibit B.
- (c) Exhibit C. Supplemental Service Specifications for Transmission Service under this Agreement are set out in Exhibit C attached hereto. Exhibit C may be amended or supplemented as agreed upon by the Company and the Customer.

2. Term of Agreement.

This agreement shall become effective on _____, 19__, and remain in effect thereafter until and unless terminated by either party in accordance with Article 3

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 49
Effective: November 6, 1992
Cancels Original Sheet No. 49

or Article 8 of the General Terms and Conditions of the Transmission Service Rate Schedule.

3. Addresses.

The address of the Company for written communication is 3201 - 34th Street South, Post Office Box 14042, St. Petersburg, Florida, 33733. (Correspondence should be directed to the attention of the Manager, Energy Control.)

The address of the Customer for such purposes is:

4. Successors.

This Service Agreement shall inure to the benefit of, and shall bind, the successors of the parties hereto but shall not be assignable.

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 50
Effective: November 6, 1992
Cancels Original Sheet No. 50

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be
executed by their respective authorized officials.

(Customer)

By _____
(Title)

Attest: _____

Dated: _____

FLORIDA POWER CORPORATION
(Company)

By _____
(Title)

Attest: _____

Dated: _____

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 51
Effective: November 6, 1992
Cancels Original Sheet No. 51

EXHIBIT C
SUPPLEMENTAL SERVICE SPECIFICATIONS
FOR TRANSMISSION SERVICE
RESALE RATE SCHEDULE T-1

Customer: _____

Point(s) of Delivery: _____

Delivery Facilities at Point(s) of Delivery (this designation is to be used in billing under
Exhibit A of this Agreement): _____

(Note: If multiple points of delivery other than interconnections covered by separate agreement are involved in rendering transmission service, attach additional page(s) to this Exhibit C listing the points of delivery and the delivery facilities at each point.)

It is the intent of the Company and the Customer that transmission transactions under this Agreement be arranged between them as the opportunity for them occurs and as they serve the parties' mutual benefit. Specific firm transactions for time periods of one year or less and all non-firm transactions may be arranged orally, unless either party requests written agreement or confirmation. Specific firm transactions for time periods of more than one year shall be covered by the execution of a Supplement to this Exhibit C. (All such Supplements shall be numbered consecutively.)

AGREED this ____ day of _____, 19____.

FLORIDA POWER CORPORATION
(Company)

(Customer)

By _____
(Title)

By _____
(Title)

SUPPLEMENT NO. ____ TO EXHIBIT C

Florida Power Corporation
FERC Electric Tariff
Second Revised Volume No. 1

First Revised Sheet No. 52
Effective: November 6, 1992
Cancels Original Sheet No. 52

SUPPLEMENTAL SERVICE SPECIFICATIONS
FOR TRANSMISSION SERVICE
RESALE RATE SCHEDULE T-1

Customer: _____

(Note: To be executed only for specific firm transmission transactions for time periods of more than one year. If no such transactions are anticipated during the initial operations under this Agreement, please enter "None" on the first line below and do not execute this Supplement.)

Customer's Power Supplier: _____

Point(s) of Receipt on Company's System: _____

(Note: If point(s) of delivery for firm transmission service under the supplement are not the same as those set forth in Exhibit C, attach additional page(s) to this supplement listing point(s) of delivery involved in the transaction covered by this supplement specifying allocations of power, if any, to each delivery point.)

Duration of Commitment: _____

Contract Demand: _____

(Note: If the commitment involves delivery of an ownership share of a generating unit, the initial contract demand shall be based on the nominal capacity rating and, thereafter, adjusted as appropriate to reflect subsequently established ratings.)

Addenda: _____

AGREED this ____ day of _____, 19__.

FLORIDA POWER CORPORATION
(Company)

(Customer)

By _____
(Title)

By _____
(Title)

REBUTTAL TESTIMONY
OF
JEFFRY POLLOCK

FLORIDA POWER CORPORATION

DOCKET NO. 930676-EI

**REBUTTAL TESTIMONY OF
JEFFRY POLLOCK**

1 Q. Please state your name and business address.

2 A. Jeffry Pollock; 7730 Forsyth Blvd., St. Louis, Missouri 63105.

3

4 Q. Are you the same Jeffry Pollock who has previously filed Direct
5 Testimony on behalf of Florida Power Corporation (FPC) in this docket?

6 A. Yes.

7

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

9 A. I shall respond to certain allegations raised in the testimony and exhibit
10 of Mr. John B. Ramil on behalf of Tampa Electric Company (TECO).
11 Specifically, Mr. Ramil alleges that TECO's "retail Customers will still be
12 better off by approximately \$16.3 million, as a result of our obtaining
13 these two power supply agreements." (Testimony of John B. Ramil at
14 Page 7, Lines 13 through 17.) I shall demonstrate the serious flaws in
15 Mr. Ramil's cost-benefit analysis which, when corrected, result in a net
16 loss to TECO's retail customers.

17

18 Second, Mr. Ramil states that FPC has consistently overlooked the fact
19 that the Transmission Project "...was necessary, indeed absolutely
20 essential, for us to obtain the benefits of these two power supply

1 agreements." (Testimony of John B. Ramil at Page 11, Lines 8 through
2 12) This statement by Mr. Ramil falsely assumes three things: (1) that
3 TECO's retail customers will benefit from the Transmission Project; (2)
4 that the failure to construct the 69 kV transmission line would
5 necessarily prevent TECO from providing power to the two cities at the
6 price agreed upon; and (3) that the Commission should somehow
7 overlook its obligation to protect the interests of and avoid injury to
8 retail customers. (Testimony of John B. Ramil at Page 11, Lines 9
9 through 12.)

10
11 Mr. Ramil also implies that the issues raised in this Docket can be dealt
12 with in TECO's next retail rate case. (Testimony of John B. Ramil at
13 Page 29, Lines 8 through 15; Page 37, Line 12 through 16.) My
14 response is that neither the Commission, the utilities nor retail
15 customers in this State can afford to wait until TECO's next rate case
16 to resolve this issue.

17
18 Finally, Mr. Ramil's claim that direct transmission service would solve
19 the dilemma facing a transmission dependent utility (TDU) is false.
20 (Testimony of John B. Ramil at Page 20, Lines 3 through 10.) Any
21 disadvantage otherwise resulting from the cities being transmission
22 dependent is greatly diminished by the transmission access provisions
23 of the Energy Policy Act of 1992 and FPC's willingness to wheel
24 electric power and energy. Also the excessively long (21 year) term of

1 the Fort Meade/Wauchula contracts merely transfers any such
2 "dependence" by the cities from FPC to TECO. In fact, if TECO
3 completes its proposed project, the two cities actually become more
4 transmission dependant on a single power supplier (TECO) than would
5 be the case by relying on TECO for wholesale power and on FPC
6 transmission service.
7

8 Q. Are you sponsoring any exhibits in connection with your rebuttal
9 testimony?

10 A. Yes. I am sponsoring Exhibit (JP 8). This exhibit is based on
11 analyses that were prepared under my direct supervision. A copy of this
12 exhibit is attached to my profiled rebuttal testimony.
13

14 The Commission Should Resolve Now
15 the Issues Raised in FPC's Petition

16 Q. Why shouldn't the Commission wait until TECO's next rate case to
17 resolve the issues raised by FPC's Petition in this docket?

18 A. As stated in my direct testimony, only by acting now can the
19 Commission be assured that it will prevent the harm to both FPC and
20 TECO retail customers which will result from the unnecessary
21 expenditure of capital for the TECO Transmission Project. This will
22 protect the interests of TECO's retail customers since they will not have
23 to bear the costs of a transmission line which is duplicative and

1 uneconomic, and FPC's retail customers will continue to benefit from
2 the revenues derived from transmission service.

3
4 As was demonstrated in Exhibit ____ (JP-7) attached to my direct
5 testimony, the annual cost of wheeling through FPC is only \$289,000
6 on a levelized net present value basis. By contrast, the levelized annual
7 revenue requirement of the Fort Meade-Wauchula 69 kV transmission
8 line is over \$2.3 million, nearly eight times greater than the wheeling
9 cost. Thus, retail customers will benefit if the Commission enjoins
10 construction of the line.

11
12 Unless TECO would agree to have its shareholders absorb this annual
13 \$2.0 million of excess cost to construct the Transmission Project
14 (\$2.313 million less \$.289 million), it will be rolled into TECO's overall
15 transmission cost of service. A portion of this excess cost will be
16 allocated to the FERC jurisdiction. This will result in higher rates paid
17 by the two cities. Thus, if the Commission grants the relief sought by
18 FPC in this Docket, the cities will also benefit because the wholesale
19 cost of service will be lower.

20
21 By pursuing a lower cost option (i.e., wheeling) rather than constructing
22 a duplicative and uneconomic transmission line, TECO is more likely to
23 be allowed to recover all costs associated with the sales to Fort Meade
24 and Wauchula. This is because wheeling, like any other transmission

1 cost, would be a reasonable and necessary expense of providing service
2 to the two cities. Full cost recovery would mean that TECO and its
3 shareholders would benefit if the Commission grants the relief sought
4 by FPC in this Docket.

5
6 In summary, the Commission, by acting now rather than waiting to
7 resolve this issue in TECO's next rate case, can protect the interests of
8 the retail customers, the two cities, FPC and TECO.

9
10 **Q. Are there any other reasons why the Commission should act in this**
11 **docket to resolve the issues raised in Florida Power's petition?**

12 **A.** Yes. The Commission has historically acted as a "surrogate" for
13 competition. With the trend toward more competition in the utility
14 industry, it becomes essential for the Commission to establish policy
15 guidelines to avoid the very problem raised by FPC's petition; namely
16 the construction of a duplicate and uneconomic transmission line.
17 Commission inaction could be misinterpreted as allowing parties to
18 circumvent its authority to review the need for facilities to ensure their
19 compatibility with the "Grid" law. Failure to clarify the meaning of the
20 "Grid" law now could therefore lead to other potentially duplicative and
21 uneconomic generation, transmission and/or distribution facilities. It
22 could also erroneously imply that utilities can build unneeded facilities
23 regardless of the impact on retail customers. To the extent that other
24 utilities seek to force retail customers to underwrite these duplicative

1 and uneconomic investments, the real beneficiary of competition would
2 be utility shareholders at the expense of retail customers. It would be
3 ironic in the extreme if competition were abused to benefit only utility
4 shareholders, rather than hold rates down for retail customers.

5
6 TECO's Cost-Benefit Analysis is Wrong

7 Q. Have you reviewed the cost-benefit analysis sponsored by Mr. Ramil?

8 A. Yes. Mr. Ramil's cost benefit analysis is provided in Exhibit No
9 (JBR 1), Document No. 2, Page 3. According to Mr. Ramil's analysis,
10 because the Fort Meade and Wauchula non-fuel revenues would be
11 \$33.956 million, while the transmission line revenue requirement would
12 be only \$17.650 million (both on a cumulative net present worth basis),
13 retail customers allegedly would be almost \$16.3 million better off
14 because TECO secured these two power supply agreements.

15
16 Q. Is Mr. Ramil's analysis correct?

17 A. No. Mr. Ramil compared the non-fuel revenues to be derived from sales
18 to Fort Meade and Wauchula only to the cost of constructing the 69 kV
19 Transmission Project. This comparison is misleading and wrong. For
20 example, it ignores all incremental generation and transmission plant
21 costs and corresponding expenses that will be incurred to provide firm
22 service to Fort Meade and Wauchula. By ignoring these costs, TECO
23 has made the implicit assumption that the Fort Meade and Wauchula

1 power supply agreements would have no impact whatsoever on future
2 generation and transmission planning. This is certainly not the case
3

4 First, the Fort Meade and Wauchula loads are firm. This means that the
5 Fort Meade and Wauchula loads are considered by TECO in assessing
6 the reliability of both the generation and transmission system. It is the
7 projected firm demands that determine how much generation capacity
8 TECO requires to maintain reliable service to all of its customers,
9 including Fort Meade and Wauchula.
10

11 Second, TECO is planning to add generation capacity over the next ten
12 years. The Fort Meade and Wauchula power supply agreements are for
13 a 21-year term.
14

15 Third, the fact the TECO is projecting to build new generation capacity
16 means that it will not have surplus capacity from which service can be
17 provided to Fort Meade and Wauchula. However, even if TECO were
18 projecting to have surplus capacity throughout the entire 21-year term
19 of the Fort Meade/Wauchula contracts, Mr. Ramil's analysis would still
20 be flawed. This is because he failed to consider non-fuel variable
21 operation and maintenance (O&M) expenses associated with these sales
22 in his cost-benefit analysis.

1 Finally, Mr. Ramil's analysis is also based on the false assumption that
2 the sales to the two cities will inevitably alleviate the revenue
3 responsibility borne by retail customers.
4

5 Q. Is there a legitimate reason for excluding generation and transmission
6 plant costs from the cost-benefit analysis?

7 A. No. TECO is, in fact, planning to add generation capacity during the 21
8 year term of the Fort Meade/Wauchula contracts. Further, the cities
9 also require the use of TECO's high voltage transmission system in
10 addition to the 69 kV transmission line to receive firm service from
11 TECO. The inclusion of both generation and transmission plant costs is
12 also consistent with cost benefit analyses conducted for various
13 conservation and non-firm service options. Thus, there is no legitimate
14 reason for excluding generation and transmission plant costs from the
15 cost-benefit analysis.
16

17 Q. Is Mr. Ramil correct in stating that TECO's retail customers will
18 inevitably benefit because the non-fuel revenues in excess of the
19 Transmission Project revenue requirements will make a contribution to
20 fixed costs?

21 A. No. As mentioned previously, Mr. Ramil understated the fixed costs by
22 ignoring generation and transmission plant in his cost-benefit analysis.
23 However, even assuming that TECO would have surplus generation and
24 transmission capacity throughout the 21-year term of the Fort Meade/

1 Wauchula contracts, it still does not follow that retail customers would
2 benefit from these incremental wholesale sales.

3
4 Mr. Ramil cites the Commission's decision in TECO's 1985 rate
5 proceeding, Docket No. 850050-EI, as providing an incentive for the
6 Company "to pursue, to the greatest extent possible, revenues from off
7 system sales in order to encourage the Company to make the fullest use
8 of its generating capacity." (Testimony of John B. Ramil, Page 8, Lines
9 9 through 11.) The reality of that case was that at the time TECO had
10 substantial surplus generating capacity which was not needed to meet
11 the needs of its retail customers. Consequently, the Commission set
12 aside the costs associated with 214 MW of capacity associated with
13 TECO's Big Bend Unit No. 4 in determining retail revenue requirements.
14 In other words, retail customers were not supporting the costs
15 associated with this 214 MW of Big Bend Unit No. 4 capacity in base
16 rates. Thus, any sales made from this surplus capacity would have
17 benefitted TECO's shareholders, not retail customers.

18
19 Applying this same regulatory principle to Mr. Ramil's cost-benefit
20 analysis, which implicitly assumes that TECO will have surplus capacity
21 throughout the 21-year term of the Fort Meade/Wauchula contracts, it
22 doesn't follow that pursuing these sales would alleviate the cost
23 responsibility borne by retail customers. It is equally plausible is that the
24 Commission would simply take this surplus capacity into account by

1 excluding the associated costs from retail base rates. Thus, any sale of
2 surplus capacity would only benefit TECO's shareholders.

3
4 Q. Have you corrected Mr. Ramil's cost-benefit analysis to include
5 generation and transmission costs?

6 A. Yes. A corrected cost-benefit analysis is provided in Exhibit ____ (JP-8).
7 Columns 1 and 6 were taken directly from Ramil's Exhibit ____
8 (JBR-1), Document No. 4. In order to incorporate generation and trans-
9 mission costs into the analysis, I calculated the per unit revenue
10 requirement associated with these functions using the stipulated Cost
11 of Service Studies (Late Filed Exhibit Nos. 98 and 99) from TECO's last
12 base rate case, Docket No. 920324-El. The derived
13 generation/transmission plant cost is \$147 per kW-year. The
14 generation/transmission plant cost associated with Fort Meade and
15 Wauchula (Column 4) is the product of the generation/transmission plant
16 cost per kW-year (Column 3) and the projected average monthly Fort
17 Meade/Wauchula loads (Column 2). The total revenue requirement
18 associated with the Fort Meade/Wauchula sales is shown in Column 5,
19 which is the sum of Columns 1 and 4. Comparing the total revenue
20 requirement (Column 5) to the Fort Meade/Wauchula nonfuel revenues
21 (Column 6) yields the net benefits, which are shown in Column 7.

1 As can be seen, the net benefits are projected to be negative in all 21
2 years of the contracts. On a cumulative net present value basis, the net
3 benefits to retail customers would be a negative \$10.321 million.

4
5 (C) At various places in his testimony, Mr. Hamill alleges that it was TECO's
6 commitment to build a transmission line that prevented the loss of these
7 two wholesale transactions. Is this commitment a factor that the
8 Commission should consider in evaluating FPC's petition?

9 A I would suggest to the Commission that, as a policy matter, this is not
10 a relevant factor in analyzing today of whether the proposed project is
11 an "uneconomic duplication" of an existing facility.

12
13 TECO now has wholesale power contracts with both of the cities.
14 It is difficult to understand why the cities would not continue to
15 accept service from TECO without the transmission line, so long as the
16 price factors remain the same. As I have explained, any wheeling costs
17 incurred by TECO on behalf of Ft. Meade and Wauchula are likely to be
18 considered reasonable and necessary expenses. The cities will not have
19 to pay two transmission charges because TECO is apparently obligated
20 not to seek any further reimbursement from the cities for wheeling costs
21 after July of 1995.

1 TECO's Claim that Direct Transmission Service was Necessary
2 to Offset the Disadvantages and Uncertainties of a
3 Transmission Dependent Utility is False

4 Q. Mr. Ramil and the cities' witnesses have also discussed at length the
5 value the cities allegedly placed on "direct transmission service",
6 claiming that transmission dependent utilities, like Fort Meade and
7 Wauchula, are concerned about being locked out of the competitive bulk
8 power market by a transmission controlling utility that could use its
9 transmission market power to favor its own generation. Should the
10 cities' desires for direct service from its wholesale supplier be
11 considered by the Commission in evaluating whether the proposed
12 HCO project is an "uneconomic duplication" of IFC's existing facilities?

13 A. No. Mr. Ramil totally ignores the transmission access provisions con-
14 tained in the Energy Policy Act of 1992 (EPAAct), which was enacted
15 last September. The EPAAct amended Section 211 of the Federal Power
16 Act as follows: "Any electric utility, Federal power marketing agency,
17 or any other person generating electric energy for sale for resale may
18 apply to the Commission for an order under this subsection requiring a
19 transmitting utility to provide transmission services (including any
20 enlargement of transmission capacity necessary to provide such
21 services) to the applicant." Thus, contrary to Mr. Ramil's testimony on
22 Page 16, Lines 18 through 21, wholesale power purchasers can enjoy
23 the full options available to them as are available to other entities.

1 The Federal Energy Regulatory Commission (FERC) also has the
2 authority to order a transmitting utility "to provide wholesale transmis-
3 sion services at rates, charges, terms, and conditions which permit the
4 recovery by such utility of all the costs incurred in connection with the
5 transmission services and necessary associated services, including, but
6 not limited to, an appropriate share, if any, of legitimate, verifiable and
7 economic costs including taking into account any benefits to the
8 transmission system in providing the transmission service, and the costs
9 of any enlargement of transmission facilities."

10
11 The bottom line is that FPC could not refuse to wheel electric power
12 and energy on behalf of the cities of Fort Meade and Wauchula.
13 Further, as discussed in Mr. Nixon's testimony, the cities could initiate
14 a filing at the FERC and play an important role in determining the rates,
15 terms and conditions under which FPC would provide transmission
16 service.

17
18 All of this assumes, without evidence, that FPC would be unwilling to
19 provide transmission services at reasonable rates. Mr. Nixon's
20 testimony demonstrates the contrary. Further, as Mr. Ramil concedes,
21 TECO currently wheels electric power and energy to support other of its
22 wholesale power sales (Testimony at Page 23, Lines 4 - through 6).

1 Q. Would the construction of the Fort Meade-Wauchula 69 kV transmission
2 line result in the cities being less transmission dependent?

3 A. No. As Mr. Stillwagon testifies, present plans call for the removal of
4 FPC's existing interconnections with the two cities. Further, no
5 provisions have been made to reestablish an interconnection with FPC.

6
7 By eliminating the FPC interconnection, the cities will have given away
8 their leverage to negotiate more favorable transmission rates, terms and
9 conditions from TECO. Finally, in exchange for direct transmission
10 service, the two cities agreed to 21-year power supply agreements with
11 TECO. This is an extremely long contract term in this day and age with
12 the advent of exempt wholesale generators, qualifying facilities and
13 independent power producers. The excessive length of these two
14 power supply agreements, in my opinion, will make the cities even more
15 transmission dependent on TECO than would have been the case had
16 they remained as wheeling customers of FPC. Thus, I would not agree
17 with Mr. Ramil's claim that direct transmission service was necessary
18 to solve the dilemma facing a transmission dependent utility. This is
19 therefore simply not a pertinent factor for Commission consideration in
20 this docket.

21
22 Q. Does this conclude your rebuttal testimony?

23 A. Yes, it does.

Docket No. 9306/6-11
 Exhibit (JBR)
 Witness: Pollock

TAMPA ELECTRIC COMPANY

Corrected Cost-Benefit Analysis of Fort Meade-Wauchula 69 kV Transmission Project (Amounts in Thousands)

Line	Year	Transmission Line Revenue Requirement (1)	Projected Average Monthly Load (MW) (2)	Generation/ Transmission Plant Cost Per kW-Yr (3)	Annual Revenue (4)	Total Revenue Requirement (5)	Fort Meade- Wauchula Nonfuel Revenue (6)	Net Benefit (7)
1	1993	\$ 0	10.3	\$147	\$ 2,813	\$ 2,813	\$ 2,788	(\$ 25)
2	1994	0	10.6	147	2,877	2,877	2,814	(63)
3	1995	1,432	20.0	147	2,943	4,375	2,891	(1,484)
4	1996	2,797	20.4	147	2,995	5,792	2,746	(3,046)
5	1997	2,699	20.8	147	3,061	5,760	2,979	(2,781)
6	1998	2,606	21.3	147	3,128	5,734	3,059	(2,675)
7	1999	2,516	21.7	147	3,194	5,710	3,338	(2,372)
8	2000	2,430	22.1	147	3,247	5,677	3,593	(2,084)
9	2001	2,348	22.6	147	3,313	5,661	3,648	(2,013)
10	2002	2,268	23.0	147	3,380	5,648	3,709	(1,939)
11	2003	2,190	23.4	147	3,433	5,623	3,959	(1,664)
12	2004	2,112	23.8	147	3,502	5,614	4,012	(1,602)
13	2005	2,034	24.3	147	3,570	5,604	4,065	(1,539)
14	2006	1,956	24.7	147	3,625	5,581	4,339	(1,242)
15	2007	1,878	25.2	147	3,694	5,572	4,395	(1,177)
16	2008	1,800	25.7	147	3,767	5,567	4,450	(1,117)
17	2009	1,722	26.2	147	3,842	5,564	4,506	(1,058)
18	2010	1,644	26.7	147	3,918	5,562	4,561	(1,001)
19	2011	1,566	27.2	147	3,995	5,561	4,903	(658)
20	2012	1,488	27.7	147	4,074	5,562	4,962	(600)
21	2013	1,410	28.3	147	4,155	5,565	5,025	(540)
22	Cumulative NPV	\$17,650			\$32,627	\$50,277	\$33,956	(\$16,321)

(1)(6) Per Exhibit (JBR-1), Document No. 4

(2) 12 CP average MW

(3) Production/transmission nonfuel revenue requirements per 12 CP average kW

(4) Column (2) times Column (3)

STILLWAGON

REBUTTAL TESTIMONY
OF
DONALD R. STILLWAGON

FLORIDA POWER CORPORATION

DOCKET NO. 930676-EI

**REBUTTAL TESTIMONY OF
DONALD R. STILLWAGON**

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

2 A. In my direct testimony, I presented data using Florida Electric Power
3 Coordinating Group (FCG) loadflow databank cases to describe the
4 adequacy of the existing Florida Power Corporation (FPC) transmission
5 facilities in the area that serve the cities of Ft. Meade and Wauchula. I
6 also presented reliability data based upon records kept by FPC's System
7 Planning Department that demonstrated the availability of the
8 transmission lines serving the cities. Finally, my direct testimony
9 presented an analysis of the planned FPC improvements in the area,
10 and how they would affect the service to the cities. In this rebuttal
11 testimony, I will address statements by the Tampa Electric Company
12 (TECO) witnesses in their direct testimony which attempt to challenge
13 the information in my direct testimony.

14

15 Q. In his direct testimony, TECO witness John B. Ramil discusses the FPC
16 transmission facilities. Does TECO consider the existing FPC facilities
17 currently serving the cities of Ft. Meade and Wauchula to be adequate
18 and reliable?

1 A. Yes. In his direct testimony, Mr. Ramil states that TECO considered
2 using FPC transmission facilities not only initially but nearly throughout
3 the entire negotiation. (Testimony of John B. Ramil, page 21, lines 4 -
4 20) This confirms that TECO also believes the existing FPC system to
5 be adequate and reliable. Further, Mr. Ramil states that FPC witness
6 Bischoff did not need to discuss the adequacy and reliability of the
7 existing facilities, since TECO did not seek to contest the operational
8 reliability of any of Florida Power's facilities operating in their present
9 configuration. (Testimony of John B. Ramil, page 32, lines 15 - 23 and
10 page 33, lines 4 - 6)

11
12 Q. Apparently referring to my direct testimony in these proceedings, TECO
13 witness T. Leonard Porter states that, "Mr. Stillwagon acknowledges
14 that momentary outages are a critical measure of reliability," and then
15 states his opinion that this omission (of momentary outage data) by FPC
16 neglects an important part of system reliability. (Testimony of T.
17 Leonard Porter, page 22, lines 3 - 12) Is this true?

18 A. No. Nowhere in my direct testimony do I state such a conclusion.
19 First, all power companies want their customers to have reliable service
20 within a reasonable cost. FPC recognizes, as does the utility industry,
21 that the major economic impact to customers occurs for outages of a
22 duration longer than one minute. Thus the FPC Planning Department
23 has assembled a historical data base containing this outage data for the
24 purpose of measuring this most important aspect of reliability. In my

1 testimony it is this data base that is discussed. However, FPC's
2 Transmission Design Department does maintain data on breaker and
3 switch operations which can be used to calculate line outages including
4 momentary outages. This data base is used to monitor the historical
5 performance of lines, and to indicate when problems may exist. FPC
6 does consider momentary outages important, and designs and maintains
7 its system to hold momentary outages to an acceptable level.

8
9 Q. Does the data base which includes momentary outages indicate that the
10 lines serving Ft. Meade and Wauchula are reliable?

11 A. Yes. When this data is examined for the line serving Ft. Meade, it is
12 found that over the last ten years the outage frequency is 5.4 per year
13 which includes 4.0 momentary trips, and 1.4 outages with a duration
14 longer than one minute. Data for the Avon Park - Wauchula 69 kV line
15 serving the City of Wauchula, shows the outage frequency for the
16 period from 1981 to the present is 8.54 outages per year, comprised of
17 7.85 momentary trips and 0.69 outages of a duration longer than one
18 minute.

19
20 These outage rates compare to the FPC system average of 29.4 per 100
21 miles per year for all FPC 69 kV transmission lines, which would equate
22 to 4.6 outages per year for the 14.29 mile line serving Ft. Meade (which
23 has 15.79 miles of exposure when tap lines are added), and 6.77
24 outages per year for the 23.03 mile line serving Wauchula. Thus, you

1 can see that the historical performance of the FPC lines serving Ft.
2 Meade and Wauchula is very close to the system average of all FPC 69
3 kV lines.
4

5 Q. Mr. Porter disputes that Ft. Meade and Wauchula enjoy looped
6 transmission service. (Testimony of T. Leonard Porter, page 13, lines
7 22 - 25, page 16, lines 16 - 19) Can you explain how TECO and FPC
8 differ on this position?

9 A. Yes. Mr. Porter contends that since the 400 foot tap into the Ft. Meade
10 substation and the 300 foot tap into the Wauchula substation are single
11 lines, the Cities do not enjoy "looped" transmission service. FPC will
12 agree that the respective 300 foot and 400 foot tap lines are not
13 looped, but the transmission system serving the taps is looped, since
14 each end connects to a source, and either of the cities can be served
15 from either end of the transmission lines that serve them. The question
16 here is whether having 300 feet out of 23.03 miles or 400 feet out of
17 14.29 miles "unlooped" is significant in terms of impact on reliability.
18 The answer to that question is clearly, "no".
19

20 Q. In his direct testimony, Mr. Porter states that the proposed TECO 69 kV
21 lines will provide superior service to the City of Ft. Meade compared to
22 that delivered by the existing FPC transmission system (Testimony of T.
23 Leonard Porter, page 16, lines 9 - 12). Is this true?

1 A. I believe it will be comparable to the service provided by the existing
2 FPC system, rather than superior. Of more importance is the fact that
3 the existing FPC transmission lines serving Ft. Meade and Wauchula are
4 adequate and reliable. There is no need for another transmission line,
5 whether or not it may provide a marginally different performance. Mr.
6 Porter is basing his opinion on the substation upgrade at the City of Ft.
7 Meade substation and the design TECO is using on their proposed 28
8 mile 69 kV line. The substation upgrade will provide a new terminal into
9 which to connect the transmission line, thus eliminating the single 400
10 foot tap line that presently exists. In addition, this upgrade will provide
11 supervisory control of the line switches, which will reduce the switching
12 times when longer duration outages do occur. This substation
13 improvement by the City of Ft. Meade eliminates the exposure to
14 outages on the single 400 foot tap line that exists today. However,
15 using historical outage data, an outage of this short line section is
16 significantly less likely to occur than a terminal outage (an outage
17 caused by substation equipment).

18
19 The major concern I have with Mr. Porter's contention that the TECO
20 line will be more reliable is that TECO's design improvements will be
21 incorporated into a line that will be 28 miles in length. The proposed
22 improvements by the City of Ft. Meade to their substation could be
23 made and the existing, much shorter, FPC line reconnected into the
24 substation. Further, later this year (in 1994) with the installation of the

1 FPC Homeland switching station, the FPC line will be shortened from
2 14.29 miles to 6.11 miles. It is very difficult to believe that TECO can
3 construct a new 28-mile line that will be noticeably more reliable than
4 6.11 miles of the existing FPC 69 kV line.
5

6 Q. Mr. Porter makes the point that the Wauchula switching station
7 proposed by TECO will reduce the number of momentary outages to
8 Wauchula. (Testimony of T. Leonard Porter, page 17, lines 11 - 20)
9 Why does this occur?

10 A. If TECO does not install a switching station at Wauchula with breakers,
11 then any outage of the proposed 60-mile transmission line will cause an
12 outage at Wauchula. By installing breakers, the exposure to momentary
13 outages is almost eliminated, since the lines to either side can trip
14 independently. However, Wauchula customers will still see voltage dips
15 which may cause "blinks," since line faults will cause a voltage drop
16 until the breakers open and disconnect the faulted line. Currently,
17 Wauchula will experience the momentary outages on the 23.03-mile
18 FPC line. For longer duration outages on the line, FPC can quickly
19 isolate the line section with the problem by operating the supervisory
20 controlled switch at the Wauchula tap, and re-energize the other line,
21 restoring service. If TECO and Wauchula can justify the switching
22 station to reduce momentary outages, it could be added to the shorter
23 existing FPC line.

1 Q. Mr. Porter states that the proposed FPC Homeland switching station
2 (1994) and the proposed Bowling Green 230/69 kV substation are
3 irrelevant to the issue of the proposed TECO line. (Testimony of T.
4 Leonard Porter, page 22, lines 23 - 25, and page 23, lines 1 - 4) Is this
5 true?

6 A. Certainly not. The proposed FPC Homeland substation improves the
7 existing FPC transmission system which serves Ft. Meade by reducing
8 the line exposure between breakers from 14.29 miles to only 6.11
9 miles. Even though there is no need to upgrade the capability of the
10 existing line for the purpose of serving Ft. Meade, the city will benefit
11 from the 1994 construction of Homeland substation. The planned
12 substation at Bowling Green (1996) is required to source the Ft. Meade
13 - Vandolah 69 kV line. In the event that future improvement of the local
14 system serving Wauchula is required, Wauchula will benefit by being
15 located only approximately 8.5 miles from this new 230/69 kV
16 substation, which is much closer than any other 230/69 kV source
17 substation. Therefore these projects are relevant since they further
18 demonstrate that there is no need for TECO to build a new 69 kV
19 transmission line.

20
21 Q. Mr. Porter argues that the only facilities that FPC will have unused and
22 be required to remove are the 400-foot and 300-foot tap lines that serve
23 the Cities, and thus, he states that FPC will have no other facilities

1 impact. (Testimony of T. Leonard Porter, page 15, lines 16 - 24, page
2 17 lines 22 - 25, and page 18, lines 1-3) Is this true?

3 A. No. FPC planned and constructed its electric system to provide for
4 serving the Ft. Meade and Wauchula loads together with all the other
5 loads served by the FPC electric system. It is not possible to split out
6 specific facilities that serve Ft. Meade and Wauchula since the electric
7 system functions as an integrated grid and portions of many facilities
8 are required to serve any load on the grid. Mr. Porter has discussed
9 only the actual connection facilities, which are only a small part of the
10 facilities picture.

11
12 Q. Mr. Porter states you imply that only FPC owns and operates significant
13 facilities in southern Polk county. (Testimony of T. Leonard Porter, page
14 20, lines 7 - 13) Did you intend to imply that TECO does not own and
15 operate transmission facilities in the south half of Polk County?

16 A. No. The color map (DRS-1) provided in my prefiled direct testimony
17 clearly shows transmission ownership. From this map you can see that
18 while FPC owns the transmission facilities closest to Ft. Meade and
19 Wauchula, TECO also owns lines in Polk County. Further, the map
20 shows that North Bartow is connected to a TECO 230 kV line (and to
21 FPC's West Lake Wales substation via a 69 kV line). The map also
22 shows very clearly that Ft. Meade and Wauchula are well within the
23 FPC electric grid. The point I made in my direct testimony is that FPC
24 is the only transmission service provider within approximately 8 to 10

1 miles of the Cities, that FPC is presently providing transmission service
2 to this area, and that FPC's bulk (230 kV) transmission lines are the
3 closest to the cities.

4
5 Q. Mr. Porter states that it is common for utilities to own facilities within
6 the service territory of another utility. (Testimony of T. Leonard Porter,
7 page 20, lines 18 - 23) If this is true, how may such construction be
8 justified?

9 A. Such ownership is not unusual, and usually results when existing lines
10 are surrounded as new territorial boundaries are developed, or when
11 express lines are built through a service territory to resolve an
12 inadequacy of the existing grid. Another situation that may occur is
13 when territorial protrusions extend into adjacent utilities, and it is not
14 feasible for each utility to avoid the others' service territory when
15 constructing new lines.

16
17 Q. Mr. Porter states that FPC owns approximately 10 miles of 69 kV lines
18 which have been constructed within TECO's service territory in the
19 Trilby - Zephyrhills area. (Testimony of T. Leonard Porter, page 20, line
20 25 - page 21, line 5) If this is true, when and why did FPC construct
21 the line?

22 A. FPC initially constructed the line to serve local load. I am not certain of
23 the construction date of the original line; however, I offer Exhibit ____
24 (DRS-8), which shows the state electric system in 1955 when the

1 system was composed of various 66 kV and 115 kV lines. This map
2 shows that FPC has the only lines in this area, indicating that perhaps
3 the TECO 69 kV line extending from TECO's River substation up to the
4 Dade City areas was constructed later. FPC records indicate that the
5 FPC - TECO ties in the Dade City area were made in 1957.

6
7 Further, I offer Exhibit ____ (DRS-9), which is a map of the 1926 Florida -
8 Georgia electric system, which shows that FPC then had an existing 66
9 kV line connected to substations at Croom, Trilby, Dade City and
10 Zephyrhills, with no depiction of a tie to TECO at Dade City. The
11 present 69 kV line was constructed in 1976, and the 0.52 and 0.54
12 mile connections to the cogeneration facility at Union Hall were added
13 in 1993. Transmission improvements were required to connect the
14 cogenerator into the system, whether FPC or TECO made the
15 connection. The TECO Dade City substation and transmission system
16 would have required modifications costing approximately the same as
17 the improvements to the FPC system. This cogenerator is very close to
18 a 69 kV line that FPC has owned for over 68 years.

19
20 It should also be noted that FPC has a 230/69 kV grid source point at
21 Zephyrhills North, immediately south of the area in question, and that
22 the TECO transmission support to the Dade City area is via a long 69 kV
23 line with a rating of approximately 63 MVA to the TECO River
24 substation located in Hillsborough County. The FPC transmission

1 system in the area normally supports the TECO transmission system in
2 the area, and if TECO were to disconnect from FPC, they would have
3 a radial transmission system to their Dade City retail area.
4

5 Q. Are you aware of other lines FPC may own through TECO service
6 territory?

7 A. Yes. I do not know of all such situations, but a major crossing is the
8 Higgins - Ft. Meade 115 kV double circuit line, which was constructed
9 in 1952 for the purpose of connecting the (then) now Higgins Plant and
10 the local FPC system into the FPC Ridge area system. From my
11 previous Exhibit ___ (DHS-8), it appears this was necessary, since there
12 were no other major facilities to conduct power from Higgins to Ft.
13 Meade.
14

15 Q. Mr. Porter states that your line loading calculations fail to take into
16 account the single contingency power flow methodology when stating
17 flow reductions due to TECO removing the Ft. Meade and Wauchula
18 loads from the FPC system. (Testimony of T. Leonard Porter, page 24,
19 lines 13 - 18) Can you explain why you made the calculations as you
20 did, and how the methods relate?

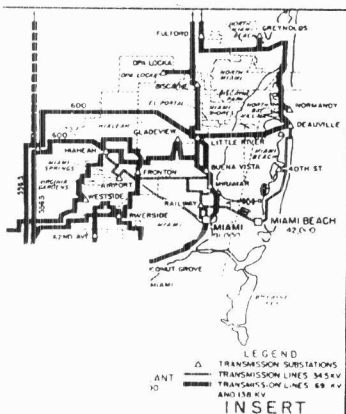
21 A. Yes. In my testimony I list the peak loads on the lines in the 1993
22 system model, the contingency loadings in the 2013 system model, and
23 describe the "unloading" of the lines in the 1995 model. There was,

1 The important thing to remember here is that the existing FPC
2 transmission lines are adequate to serve the existing load and
3 anticipated future loads of the Cities and other local customers. There
4 is sufficient margin in the existing system to provide for single
5 contingency outages. There is no system need to remove load from the
6 lines to provide a margin for normal or contingency loads. Indeed, with
7 future local generation additions that are planned or under construction,
8 the local system is in a mode of exporting power. There is no need to
9 build new 69 kV transmission lines into the area from outside source
10 substations to support the local loads. Rather, the most likely future
11 development will be to strengthen the bulk grid to carry significant
12 amounts of power out of the area.

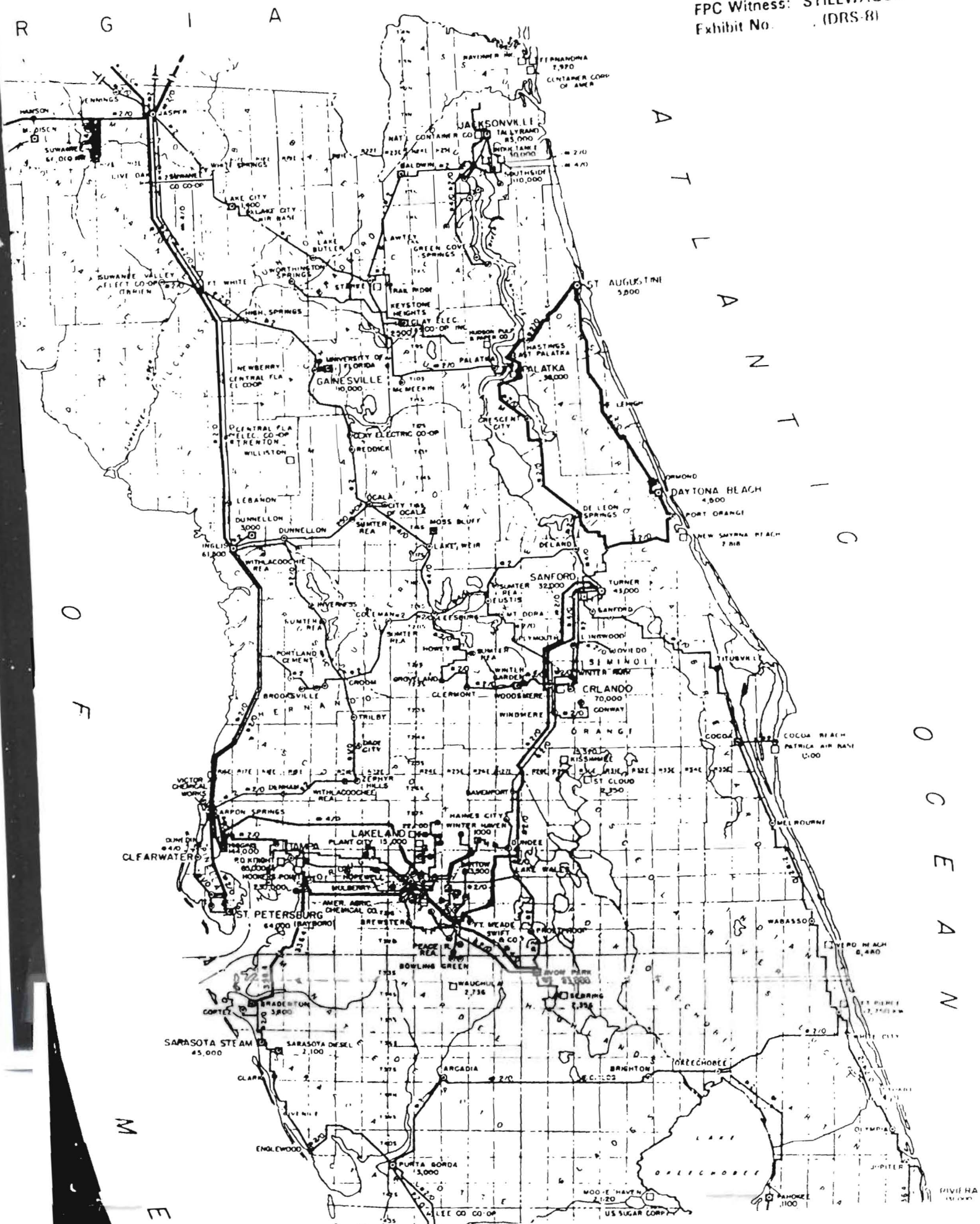
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14 Q. Does this conclude your testimony.

15 A. Yes.

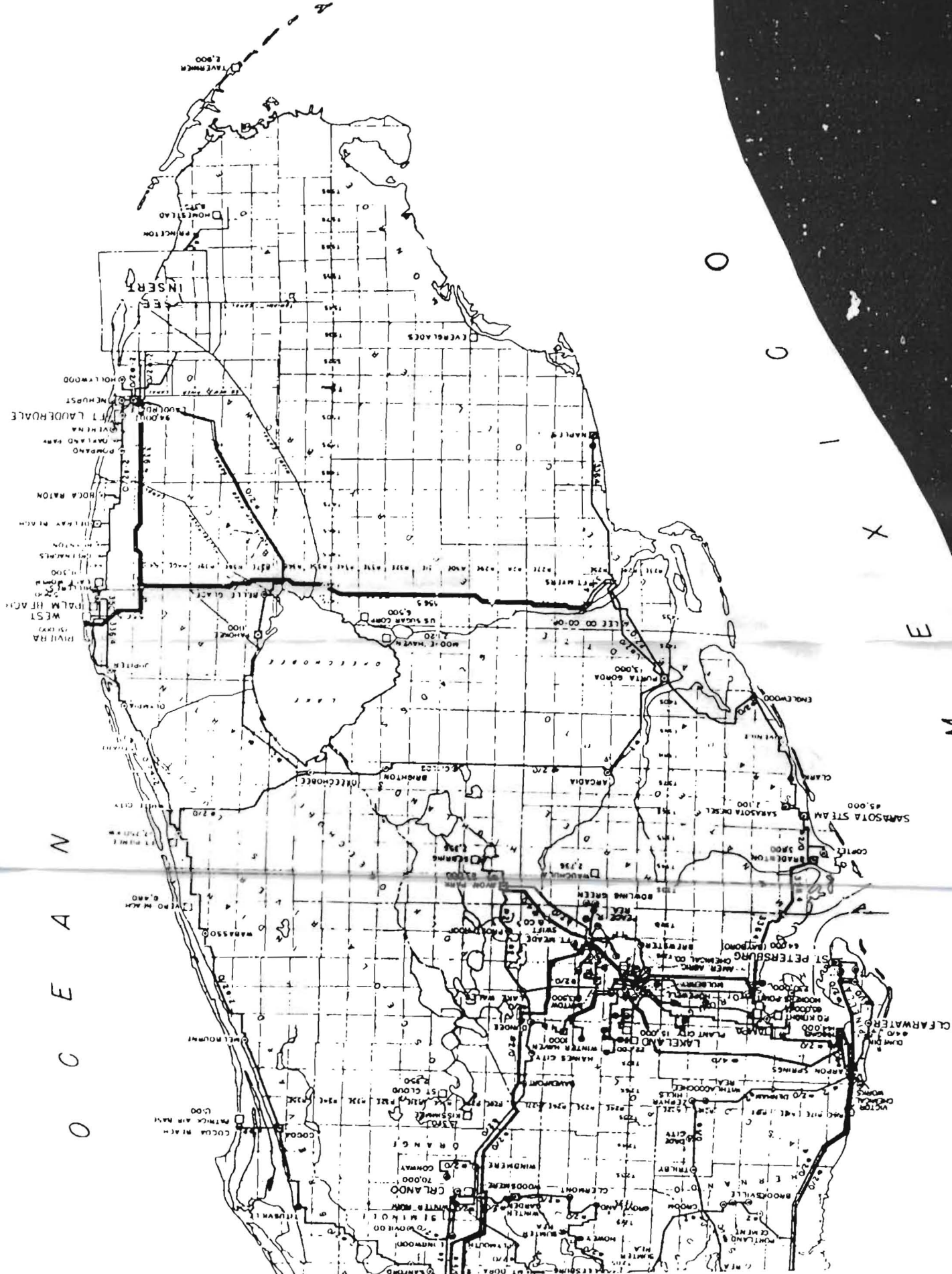
EXHIBITS

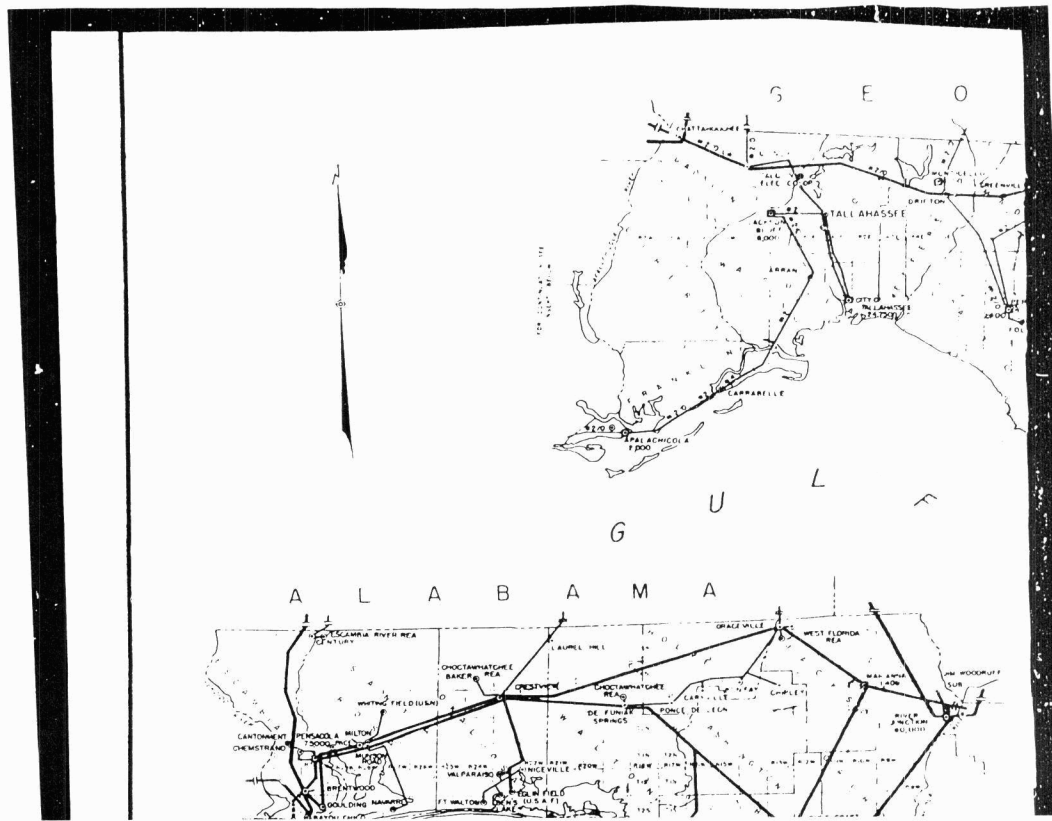
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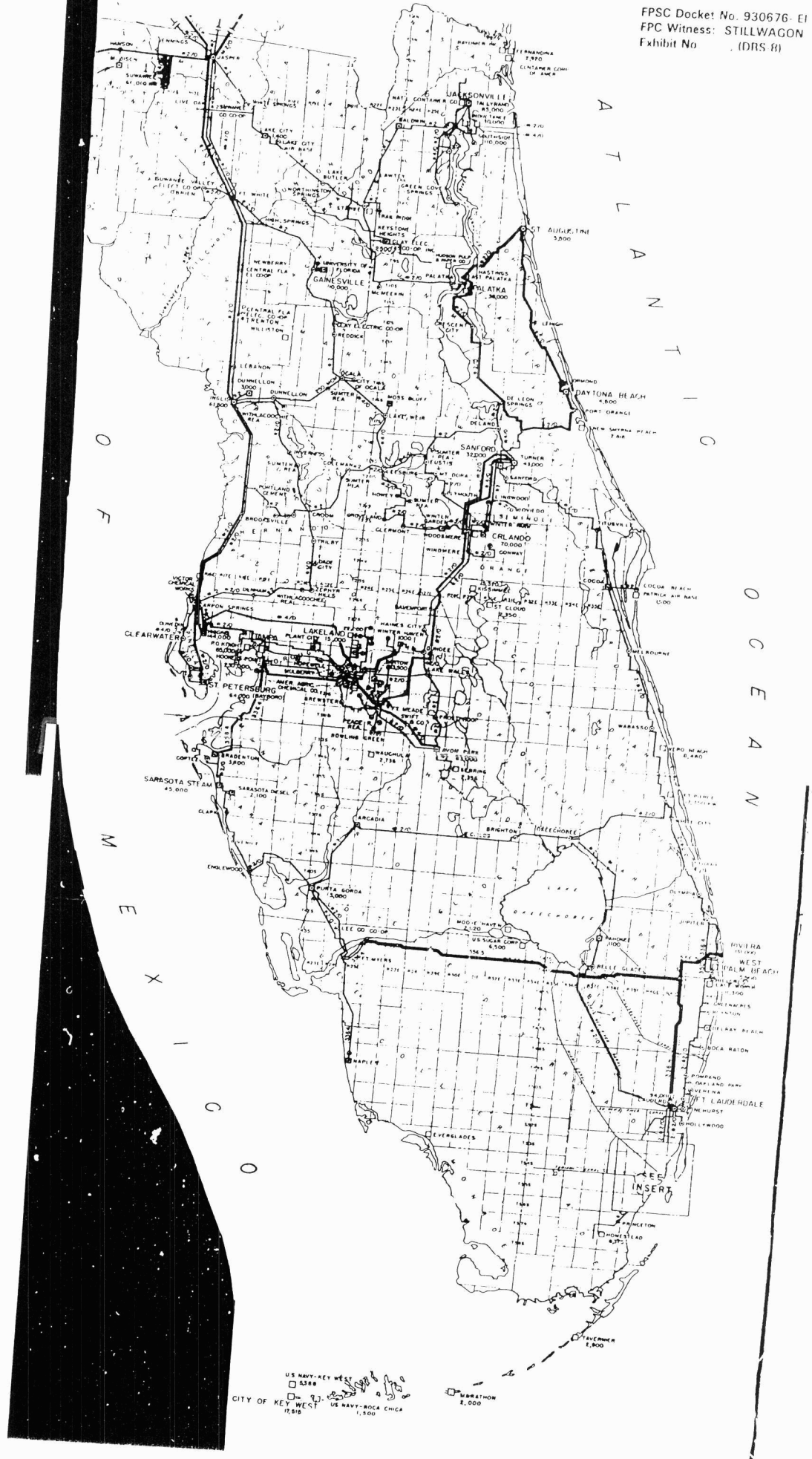
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EXPLANATION

- EXISTING TRANSMISSION LINE
- - - TRANSMISSION LINE UNDER CONSTRUCTION
- - - TRANSMISSION LINE PROPOSED
- ▲ EXISTING SUBSTATION
- △ SUBSTATION UNDER CONSTRUCTION
- △ SUBSTATION PROPOSED
- EXISTING GENERATOR STATION
- GENERATOR STATION UNDER CONSTRUCTION
- GENERATOR STATION PROPOSED





REBUTTAL TESTIMONY
OF
DR. ROBERT BRUCE PARENTE

FLORIDA POWER CORPORATION

DOCKET NO. 930676-EI

**REBUTTAL TESTIMONY OF
DR. ROBERT BRUCE PARENTE**

1 Q. What is your name, occupation, and business address?

2 A. My name is Robert Bruce Parente. I am an Electrical Engineer. My
3 business address is Post Office Box 241987, Los Angeles, California
4 90024-9787.
5

6 Q. Are you the same Dr. Robert Bruce Parente who previously submitted
7 direct testimony on behalf of the Florida Power Corporation in this
8 docket?

9 A. Yes.
10

11 Q. What is the purpose of your rebuttal testimony here?

12 A. The purpose of my rebuttal testimony is to rebut the direct testimony
13 of the Tampa Electric Company (TECO) witnesses, John B. Ramil, T.
14 Leonard Porter, Warren May Jr., and Charles C. Saddler, III, and also
15 to clarify several matters they raised in reference to my direct
16 testimony. To do that I must first focus on the real issue of this docket:
17 The fact that the proposed construction by TECO of a 60-mile long 69-
18 kV transmission line to serve the Cities of Wauchula and Fort Meade
19 would be an uneconomic duplication of Florida Power Corporation's

1 (FPC's) existing adequate and reliable transmission facilities. It is
2 undisputed that FPC's existing 69-kV transmission lines serving the
3 Cities of Wauchula and Fort Meade are adequate and reliable. There is
4 no need for another transmission line to serve those two cities.

5
6 Although my intent is to rebut the testimony of the TECO witnesses by
7 refocusing on the central issue before the Commission, my rebuttal will
8 also address the specific issues raised by the TECO witnesses which
9 may serve to detract from the real issue in this docket.

10
11 Q. What main points of your direct testimony were criticized by the TECO
12 witnesses?

13 A. I summarized my direct testimony on behalf of FPC in six points as
14 follows:

15 "TECO's proposed line is a duplication because:

- 16 1. FPC's facilities already exist;
- 17 2. FPC's existing facilities already serve the cities of
18 Wauchula and Fort Meade;
- 19 3. FPC's existing facilities have adequate capacity to serve
20 the cities of Wauchula and Fort Meade now and in the
21 foreseeable future; and
- 22 4. FPC's existing facilities serve the cities of Wauchula and
23 Fort Meade reliably.

1 "If TECO builds its proposed duplicate line, that would be an
2 *uneconomic* duplication of FPC's existing facilities because:

- 3 1. TECO's increased revenue requirements will exceed the
4 wheeling fees which TECO currently pays to FPC to use
5 FPC's existing facilities, and
- 6 2. FPC's revenue requirements will not be reduced by
7 TECO's duplication of FPC's facilities."

8 (Direct Testimony of Dr. Robert Bruce Parente, page 7, lines 6 - 28)

9
10 None of TECO's witnesses disputed my first two points: That FPC's
11 facilities already exist, and those existing facilities already serve the
12 cities.

13
14 None of TECO's witnesses directly disputed my third point: That FPC's
15 existing facilities have adequate capacity. Although Mr. Ramil observes
16 that, "Dr. Parente concludes that Florida Power's existing facilities are
17 adequate to serve the Cities of Fort Meade and Wauchula," he does not
18 dispute my conclusion. (Direct Testimony of John B. Ramil, page 34,
19 lines 8 - 10) Although Mr. Porter questions my use of the word "idle"
20 with respect to FPC's existing facilities if the cities are disconnected, he
21 does not dispute my point that FPC's existing facilities have adequate
22 capacity if the cities continue to be served. (Direct Testimony of T.
23 Leonard Porter, pages 27 - 29)

1 The criticism by the TECO witnesses about my direct testimony that I
2 will address here begins with my fourth point: "FPC's existing facilities
3 serve the Cities of Wauchula and Fort Meade reliably."

4
5 **Q. What criticism by the TECO witnesses about your testimony regarding**
6 **reliability do you need to address?**

7 **A.** Although Mr. Ramil states, "Tampa Electric did not seek to contest the
8 operational reliability of any of Florida Power's facilities," (Direct
9 Testimony of John B. Ramil, page 32, lines 21 - 23) Mr. Porter criticizes
10 my analysis of that reliability for not including momentary (less than one
11 minute) outages, and my discussion of line length in analyzing the
12 reliability of the proposed TECO 69-kV line. (Testimony of T. Leonard
13 Porter, page 30, lines 1 - 21)

14
15 **Q. Why are momentary outages excluded?**

16 **A.** In my direct testimony, I referred to Mr. Stillwagon's testimony and his
17 statistics showing that Fort Meade enjoyed service 99.996 percent of
18 the time, and that Wauchula enjoyed service 99.995 percent of the
19 time. (Direct Testimony of Donald R. Stillwagon, pages 14-16) When
20 Mr. Porter criticizes those percentages, he is correct that Mr.
21 Stillwagon's statistics do exclude momentary outages of less than one
22 minute duration; however, it is important for the Commission to
23 understand that, for the past twenty years this has been FPC's standard
24 statistical practice for recording reliability data for all of its customers

1 -- not just the Cities of Wauchula and Fort Meade. Historically, Florida
2 Power has concentrated on significant non-momentary outages that
3 contribute to unavailability and has chosen not to include momentary
4 outages in these calculations.

5
6 As Mr. Stillwagon notes in his rebuttal testimony, FPC's Transmission
7 Design Department does maintain data on breaker and switch operations
8 which can be used to calculate line outages including momentary
9 outages. That data also indicates the FPC lines serving Wauchula and
10 Fort Meade are reliable. Mr. Stillwagon quite properly points out in his
11 rebuttal testimony that the total outage rates for Wauchula and Fort
12 Meade are comparable to FPC's system average.

13
14 Q. What has line length got to do with reliability?

15 A. In my direct testimony, I stated, "Each individual lower voltage
16 transmission line's reliability is related to its length, location, support
17 structures, protective relays, and circuit breakers. For example, the
18 longer the line, the more it will be vulnerable to lightning strikes, road
19 accidents, and the hunter who 'mistakes' the insulators on the support
20 structure for a deer." (Direct Testimony of Dr. Robert Bruce Parente,
21 page 15, lines 15 - 19) I also said that, "Because its longer lengths add
22 exposure to a contingency, TECO's proposed line can be expected to be
23 less reliable than FPC's existing facilities." (Direct Testimony of Dr.
24 Robert Bruce Parente, page 29, lines 28 - 30)

1 Mr. Porter concedes that, "If all other things are equal, yes, the longer
2 the line, the more vulnerable they are to lightning strikes." (Direct
3 Testimony of T. Leonard Porter, page 8, lines 14 - 15) Mr. Porter then
4 goes on to list the design features that TECO proposes to introduce to
5 offset and compensate for its longer line length. (Direct
6 Testimony of T. Leonard Porter, page 3, lines 15 - 21; page 6, lines 3 -
7 8 and 17 - 25; and page 7, lines 1 - 3 and 7 - 13.)
8

9 When reading Mr. Porter's list of compensating design features, the
10 Commission should not be misled into the false belief that FPC's service
11 to the cities is not reliable, nor should the Commission be misled into
12 the false belief that TECO's long line can provide the cities with more
13 reliable service than FPC short lines can provide.
14

15 Currently, FPC's lines are reliable. In the future, if some change made
16 them less reliable, then FPC could introduce its own list of
17 compensating design features and restore its reliability. FPC will always
18 enjoy a reliability advantage because of its shorter lines. For example:

- 19 ■ If the State of Florida were to suffer a change in climate such
20 that lightning strikes became far more frequent, then FPC
21 could restore its transmission reliability to the cities by
22 installing a switching station in the City of Wauchula, and by
23 adding supervisory controlled substation switches in the City
24 of Fort Meade substation -- just like the switching proposed

1 by TECO -- all for far less cost than TECO's proposed 60-mile
2 long 69-kV line.

- 3 ■ If the State of Florida were to suffer a population explosion
4 in woodpeckers or drunk drivers such that damage to wood
5 poles became excessive, then FPC could restore its
6 transmission reliability to the cities by phasing-in concrete
7 poles -- just like the concrete poles proposed by TECO -- all
8 for far less cost than TECO's proposed 60-mile long 69-kV
9 line.

10
11 I am not saying that TECO's proposed line cannot be reliable. I am
12 saying that, to achieve the same reliability as FPC's short lines, TECO's
13 60-mile long line must cost more.

14
15 Q. What criticism by the TECO witnesses about uneconomic duplication do
16 you need to address?

17 A. Mr. Ramil states, "It is not until the last two pages of his testimony
18 that Dr. Parente states his basis for concluding that Tampa Electric's
19 proposed facilities would be an 'uneconomic' duplication of Florida
20 Power's transmission facility." (Direct Testimony of John B. Ramil,
21 page 35, lines 7 - 10) In criticizing my conclusion that Tampa Electric's
22 proposed line fails an engineering economics test, Mr. Ramil states that
23 my analysis looks only at the relative costs of two delivery options.
24 (Direct Testimony of John B. Ramil, page 35, lines 19-22) Then Mr.

1 Ramil disputes that wheeling through Florida Power's system and
2 Tampa Electric's construction of its own transmission facilities were
3 interchangeable options. (Direct Testimony of John B. Ramil, page 36,
4 lines 4 - 8)

5
6 Mr. Ramil is quite right in that I did conduct an engineering economics
7 test of two alternatives: Which costs less: (1) TECO paying wheeling
8 fees to FPC to use FPC's existing facilities? or (2) TECO building a
9 duplicative new transmission line?

10
11 Mr. Ramil is also quite right in that I needed less than two pages to
12 conduct that engineering economics test of the two alternatives: (1)
13 TECO paying wheeling fees of less than \$300,000 per year to use
14 FPC's existing facilities costs a great deal less than (2) TECO building
15 a new duplicative transmission line for \$11.8 million.

16
17 Mr. Ramil is quite wrong, however, in disputing that "wheeling through
18 Florida Power's system and Tampa Electric's construction of its own
19 transmission facilities were interchangeable options." They were, are,
20 and will continue to be interchangeable options. But construction of a
21 new 60-mile long TECO transmission line duplicating FPC's existing
22 transmission facilities is a far more expensive option than wheeling
23 power over FPC's existing facilities.

1 Q. How does TECO claim that wheeling and construction were not
2 interchangeable options?

3 A. TECO claims that wheeling and construction were not interchangeable
4 options by maintaining that construction of a new transmission line was
5 essential to get Fort Meade's and Wauchula's business. It appears,
6 however, that TECO acted upon the cities' erroneous belief that building
7 a second transmission line would somehow alleviate perceived
8 disadvantages the cities associated with being a transmission dependent
9 utility.

10
11 The concerns of the cities with being transmission dependent utilities
12 were articulated by TECO witnesses Saddler and May. Mr. Saddler
13 states, "Fort Meade is a transmission Dependent Utility (TDU). Fort
14 Meade has no generation on its system and currently depends on its
15 single interconnect with Florida Power." (Direct Testimony of Charles
16 C. Saddler, III, page 2, lines 24 -25, and page 3, lines 1- 2) He adds,
17 "Transmission pricing and access is also a key concern to Fort Meade
18 . . . This issue has the potential, and I believe the threat, of forcing a
19 TDU like Fort Meade out of business." (Direct Testimony of Charles C.
20 Saddler, III, page 3, lines 15-20) Mr. May, from the City of Wauchula,
21 says that, "The City's electric system has only one transmission tie to
22 the Florida Grid and insufficient generation on its own . . . the City is
23 currently dependent on a single transmission service provider, Florida
24 Power Corporation." (Direct Testimony of Warren May, Jr., page 2,

1 lines 14 - 20) Mr. May adds, "The potential is there for a transmission
2 service provider to make it economically and/or operationally infeasible
3 for a TDU to purchase power from any utility other than the
4 transmission provider." (Direct Testimony of Warren May, Jr., page 3,
5 lines 3 - 25, and page 4, lines 1 - 2)

6
7 In fact, there is no basis for the fears expressed by Mr. Saddler and Mr.
8 May, because of the regulatory powers and policies of the Federal
9 Energy Regulatory Commission (FERC). Over the years, FERC has made
10 it clear that any utility which provides wheeling will not be allowed to
11 stop providing wheeling. FPC provides its wheeling under a FERC tariff.
12 Thus, FPC's price for wheeling is set and essentially predictable.
13 Therefore, neither of the cities has any reasonable basis for fear as to
14 either access to FPC's transmission service, or FPC's price.
15 Nonetheless, Mr. Ramil reiterates, ". . . Tampa Electric's judgement that
16 agreeing to build the transmission line was necessary to win the
17 business." (Direct Testimony of John B. Ramil, page 6, lines 7 - 9)

18
19 As a regulated utility, TECO cannot be naive about the FERC, its
20 policies, and the regulations and statutes under which it operates.
21 Thus, from Mr. Ramil's admission, I conclude that it appears TECO
22 acted upon the Cities' unfounded fears in order to win a contract by
23 agreeing to build an uneconomic duplication of FPC's existing
24 transmission facilities.

1 Q. Does this conclude your testimony?

2 A. Yes.