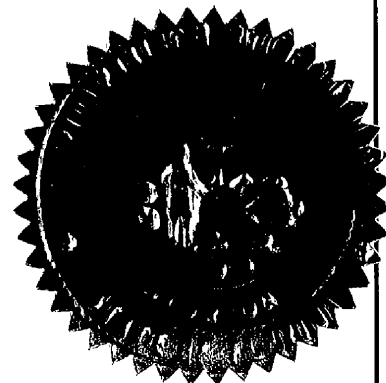


BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030084-EI

In the Matter of

PETITION FOR DETERMINATION OF  
NEED FOR COLLIER-ORANGE RIVER  
230 kV TRANSMISSION LINE IN  
COLLIER, HENDRY, AND LEE COUNTIES,  
BY FLORIDA POWER & LIGHT COMPANY



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PROCEEDINGS: HEARING

BEFORE: CHAIRMAN LILA A. JABER  
COMMISSIONER J. TERRY DEASON  
COMMISSIONER BRAULIO L. BAEZ  
COMMISSIONER RUDOLPH BRADLEY  
COMMISSIONER CHARLES M. DAVIDSON

DATE: Tuesday, April 8, 2003

TIME: Commenced at 9:30 a.m.  
Concluded at 1:21 p.m.

PLACE: Room 148  
Betty Easley Conference Center  
4075 Esplanade Way  
Tallahassee, Florida 32399-

REPORTED BY: LINDA BOLES, RPR  
OFFICIAL FPSC REPORTER  
(850) 413-6734

DOCUMENT NUMBER DATE

FLORIDA PUBLIC SERVICE COMMISSION 3334 APR 10 8

FPSC-COMMISSION CLERK

## 1 APPEARANCES:

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4 appearing on behalf of Florida Power & Light Company.

5 R. WADE LITCHFIELD, 700 Universe Boulevard, Juno  
6 Beach, Florida 33408-0420, appearing on behalf of Florida Power  
7 and Light Company.

8 ROBERT SCHEFFEL WRIGHT, Landers & Parsons, P.A., 310  
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10 behalf of Barron Collier Companies.

11 LAWRENCE D. HARRIS and COCHRAN KEATING, FPSC General  
12 Counsel's Office, 2540 Shumard Oak Boulevard, Tallahassee,  
13 Florida 32399-0850, appearing on behalf of the Commission  
14 Staff.

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I N D E X

WITNESSES

NAME:	PAGE NO.
WILLIAM ROBERT SCHONECK	
Prefiled Direct Testimony Inserted	12
VICENTE ORDAX, JR.	
Prefiled Direct Testimony Inserted	35
C. MARTIN MENNES	
Prefiled Direct Testimony Inserted	40
Prefiled Rebuttal Testimony Inserted	50

MISCELLANEOUS

CERTIFICATE OF REPORTER	81
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## EXHIBITS

1  
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NUMBER:		ID.	ADMTD.
1	FPL'S Notice of Filing Notices of Final Hearing Published in Newspapers in Areas where Proposed Line could be Placed and Affidavits of Publication	55	56
2	Exhibit A to FPL's Need Petition, including Attachments and Appendices	56	56
3	WRS-1	56	56
4	Composite Exhibit Consisting of the Telephonic Deposition of William Robert Schoneck, the Deposition of C. Martin Mennes, and FPL's Responses to Staff's 1st Interrogatories Nos. 1-6	63	63

## P R O C E E D I N G S

1  
2 CHAIRMAN JABER: Good morning. We're going to go  
3 ahead and get started this morning.

4 Counsel, read the notice.

5 MR. HARRIS: Yes. Pursuant to notice issued February  
6 the 21st, 2003, this time and place has been noticed for a  
7 final hearing in Docket Number 030084-EI, Petition for  
8 Determination of Need for Collier-Orange River 230kV  
9 Transmission Line in Collier, Hendry, and Lee Counties by  
10 Florida Power & Light Company.

11 CHAIRMAN JABER: Thank you, staff.

12 We are not going to take appearances right now. What  
13 we need to do is announce that this meeting conflicted with  
14 confirmation hearings for two of our Commissioners. So in that  
15 regard what I'd like to do is reconvene at 12:30 to give our  
16 Commissioners time to be present for the hearing, and hope that  
17 the parties take an opportunity to meet with staff and resolve  
18 as many of the issues as possible as it relates to this  
19 hearing.

20 So we will reconvene at 12:30. At that time we will  
21 take appearances and preliminary matters and ultimately decide  
22 what to do with this case. Thank you.

23 (Recess taken.)

24 CHAIRMAN JABER: Commissioners, we convened the  
25 hearing at 9:30 this morning and reconvened until 12:30, so

1 Let's get back on the record. Counsel, you've already read the  
2 notice. Let's take appearances.

3 MR. HOFFMAN: Good afternoon, Madam Chairman. My  
4 name is Kenneth A. Hoffman. I'm with the firm of Rutledge,  
5 Ecenia, Purnell and Hoffman. With me is R. Wade Litchfield  
6 with Florida Power & Light Company, and we are appearing on  
7 behalf of Florida Power & Light Company.

8 MR. WRIGHT: Robert Scheffel Wright, Law Firm of  
9 Landers & Parsons, 310 West College Avenue, Tallahassee,  
10 appearing on behalf of Barron Collier Companies.

11 MR. HARRIS: Lawrence Harris and Cochran Keating on  
12 behalf of the Commission.

13 CHAIRMAN JABER: Thank you. Mr. Harris, are there  
14 preliminary matters? Are the mikes on, Mr. Staden? Okay.  
15 Preliminary matters.

16 MR. HARRIS: Yes, Madam. The first is I believe  
17 there's a proposed stipulation between Barron Collier Companies  
18 and Florida Power & Light.

19 CHAIRMAN JABER: Mr. Hoffman, do you want to explain  
20 that proposed stipulation?

21 MR. HOFFMAN: I will. Madam Chairman, yesterday FP&L  
22 and Barron Collier Companies filed a stipulation that states  
23 that under the Transmission Line Siting Act any party to the  
24 certification hearing may, pursuant to Section 403.527(1),  
25 Florida Statutes, propose an alternate corridor for the

1 Collier-Orange River #3 project that includes location of all  
2 or a portion of the proposed project on the existing common  
3 right-of-way. And the Siting Board has the authority to  
4 determine that location of all or a portion of the  
5 Collier-Orange River #3 project on the existing common  
6 right-of-way has the least adverse impacts regarding the  
7 criteria in Section 403.529(4), Florida Statutes.

8           The stipulation goes on to state that the final  
9 determination of the most appropriate corridor route,  
10 considering all of the factors and criteria specified in  
11 Section 403.529, Florida Statutes, will be made by the Siting  
12 Board pursuant to the Transmission Line Siting Act.

13           And -- I'm sorry, Madam Chairman. And we are asking  
14 that the Commission approve that stipulation.

15           CHAIRMAN JABER: Mr. Wright, the copy of the  
16 stipulation I have has your signature as well, so this is a  
17 joint stipulation and there are no modifications to this.

18           MR. WRIGHT: Yes, Madam Chairman, that's correct.  
19 And we also are asking you to approve the stipulation.

20           CHAIRMAN JABER: Thank you.

21           Commissioners, do you have a copy of the proposed  
22 stipulation or do you need one?

23           COMMISSIONER DEASON: I had one at my desk and I  
24 failed to bring it down with me. But I'm -- well, if you have  
25 an extra copy, Mr. Hoffman, that would be fine.

1 CHAIRMAN JABER: Commissioners, as Mr. Hoffman brings  
2 up a copy, what I would like to do is entertain questions you  
3 may have from the stipulation or discussion on the stipulation.  
4 But shortly thereafter I'm going to be asking for a motion on  
5 the stipulation. So are there questions or a discussion?

6 COMMISSIONER DEASON: Madam Chairman, I don't really  
7 have a question. I guess -- it appears to me that what's  
8 contained in the stipulation is, is straightforward and pretty  
9 much irrefutable. Is that --

10 MR. HOFFMAN: That's how we view it, Commissioner.

11 MR. WRIGHT: As do we, Commissioner Deason.

12 COMMISSIONER DEASON: Very well.

13 CHAIRMAN JABER: Motion?

14 COMMISSIONER BAEZ: So moved.

15 CHAIRMAN JABER: Okay. There's been a motion to  
16 accept the stipulation.

17 COMMISSIONER BRADLEY: And a second.

18 CHAIRMAN JABER: And a second. All those in favor,  
19 say aye.

20 (Unanimous affirmative vote.)

21 CHAIRMAN JABER: The stipulation is unanimously  
22 accepted.

23 Mr. Wright, thank you for your hard work.

24 MR. WRIGHT: Thank you very much, Madam Chairman.

25 CHAIRMAN JABER: And I know that there's a follow-up



1 preliminary matter.

2 Mr. Hoffman, thank you for your hard work.

3 MR. HOFFMAN: Thank you, Madam Chairman.

4 CHAIRMAN JABER: Mr. Wright?

5 MR. WRIGHT: With your approval of the stipulation,  
6 our notice of voluntary withdrawal becomes effective. Thank  
7 y'all very much, and thanks to Mr. Hoffman.

8 COMMISSIONER JABER: And that's a notice of voluntary  
9 withdrawal that was filed today?

10 MR. WRIGHT: That's correct, Madam Chairman.

11 CHAIRMAN JABER: For purposes of the record, we'll  
12 acknowledge your withdrawal from the case. Thank you.

13 MR. WRIGHT: Yes, ma'am. Thank you.

14 CHAIRMAN JABER: Staff, there are other preliminary  
15 matters.

16 MR. HARRIS: Yes, Madam Chairman. There is an  
17 outstanding request for confidential classification which  
18 covers a substantial -- well, portions of the prefiled  
19 testimony and the petition and the supporting Exhibit A filed  
20 by Florida Power & Light on March 19th, 2003.

21 Staff would recommend that the Commission grant the  
22 request for confidential classification as filed by FPL in this  
23 docket.

24 CHAIRMAN JABER: What was the date?

25 MR. HARRIS: It was filed on March 19th, 2003.

1 CHAIRMAN JABER: Thank you. And staff's  
2 recommendation is that the request be granted?

3 MR. HARRIS: That's correct.

4 CHAIRMAN JABER: For the record, the March 19th,  
5 2003, request for confidential classification is granted.  
6 Next.

7 MR. HARRIS: The next issue is I've had some  
8 preliminary discussions with Florida Power & Light and they've  
9 indicated a desire to move the body of their prefiled direct  
10 testimony, the petition and the Exhibit A in support of that  
11 into the record without the need for live witnesses.

12 CHAIRMAN JABER: Mr. Hoffman or Mr. Litchfield, why  
13 don't we walk through your testimony and get that identified  
14 and inserted into the record, and then we'll go through  
15 exhibits.

16 MR. HOFFMAN: Thank you, Madam Chairman.

17 Let me begin with a request that the Commission admit  
18 the prefiled direct testimony of William Robert Schoneck.

19 CHAIRMAN JABER: The prefiled direct testimony of  
20 William Robert Schoneck shall be inserted into the record as  
21 though read.

22 MR. HAFF: And, Madam Chairman, just for the record,  
23 I would note that on Page 20, Line 13 of that testimony we  
24 simply wish to change the -- one, two, three -- sixth word on  
25 that line to "denial." That should say "denial."

1           COMMISSIONER BRADLEY: Would you point that out again  
2 please? Line -- which line is that?

3           MR. HOFFMAN: Line 13 of Page 20, Commissioner  
4 Bradley. We had a typo there, and that should say "denial."

5           COMMISSIONER BRADLEY: Oh, okay. Thank you. It's a  
6 misspelled word.

7           CHAIRMAN JABER: Yeah. The testimony was inserted  
8 into the record with that correction.

9           MR. HOFFMAN: Thank you, Madam Chairman.

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1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
2                   **FLORIDA POWER & LIGHT COMPANY**  
3                   **DIRECT TESTIMONY OF WILLIAM ROBERT SCHONECK, JR.**  
4                   **DOCKET NO. 030084-EI**  
5                   **FEBRUARY 26, 2003**  
6

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

8           A.     My name is William Robert Schoneck, Jr. My business address is 4200  
9                 West Flagler Street, Miami, Florida 33134.

10  
11          **Q.     By whom are you employed and what is your position?**

12          A.     I am employed by Florida Power & Light Company ("FPL") as the  
13                 Manager of Transmission Planning, Power Systems.

14  
15          **Q.     What are your responsibilities as Manager of Transmission Planning**  
16                 **in the Power Systems Business Unit?**

17          A.     My responsibilities include managing the group that is responsible for the  
18                 planning, coordination, and development of FPL's transmission expansion  
19                 plan in order to meet FPL customers' needs. I have held this position and  
20                 had these responsibilities since October of 1993. Immediately prior to my  
21                 present position, I was Manager of Transmission Operations at FPL.

22  
23          **Q.     Please briefly describe your educational and professional background.**

1 A. I received a Bachelor of Science degree in Electric Engineering with  
2 honors from the University of Florida in 1973 and a Master in Business  
3 Administration degree from Florida International University in 1982. I  
4 have also attended seminars and short courses covering topics related to  
5 transmission planning. I have been employed by FPL since 1973.

6

7 **Q. Do you hold any positions with regional or national organizations?**

8 A. Yes. I currently participate on various committees of the Florida  
9 Reliability Coordinating Council ("FRCC"). The FRCC is a voluntary  
10 organization comprised of investor-owned utilities, municipal electric  
11 utilities, rural electric cooperatives and other transmission users in Florida.  
12 The FRCC coordinates and sets standards for the operation and planning  
13 of the transmission system in Peninsular Florida. These standards are  
14 consistent with and complementary to those of the North American  
15 Electric Reliability Council ("NERC").

16

17 **Q. Are you sponsoring any portion of the Petition?**

18 A. Yes. I am sponsoring Exhibit "A" to FPL's Petition for Determination of  
19 Need for the Collier-Orange River #3 Project ("Project") filed with this  
20 Commission concurrently with my testimony on February 26, 2003.

21

22 **Q. Are you sponsoring any other exhibits?**

23 A. Yes, I am sponsoring Exhibit No.\_\_(WRS-1).

1       **Q.    Were these exhibits prepared by you or under your direction and**  
2       **supervision?**

3       A.    Yes.

4

5       **Q.    Please describe the purpose and scope of your testimony.**

6       A.    The purpose of my testimony is to sponsor and support FPL's Petition for  
7       a Determination of the Need for the Project. My testimony, as well as  
8       Exhibit "A" to the Petition, present the following information in support  
9       of the Project:

- 10       1.    A general description of the existing load and electric  
11       characteristics of FPL's electrical transmission grid,
- 12       2.    A general description of the Project including its design and  
13       operating voltage, approximate range of costs, and projected in  
14       service date,
- 15       3.    The specific conditions, contingencies and factors which  
16       demonstrate the need for the Project including a discussion of  
17       FPL's transmission planning process and the reliability benefits of  
18       the Project,
- 19       4.    The major alternatives to the Project that were evaluated and  
20       rejected by FPL in favor of the Project, and
- 21       5.    The adverse consequences to FPL's electric system and customers  
22       if the Project is delayed or denied.

23       **Q.    Describe the organization of your testimony.**

1 A. I will first provide an overview of FPL and the existing load  
2 characteristics and composition of FPL's transmission network. Second, I  
3 will describe the Project, the need for and benefits associated with the  
4 Project, and the estimated capital cost of the Project. Third, I will explain  
5 FPL's transmission planning process. Fourth, I will discuss the evaluation  
6 and analyses conducted to demonstrate the need for and benefits of the  
7 Project. Fifth, I will discuss the alternatives considered and explain why  
8 they were rejected in favor of the Project. Finally, I will address the  
9 adverse consequences to FPL's customers if the Project is denied or not  
10 timely approved.

11

12 **Q. How does your testimony relate to the testimony of Mr. Mennes?**

13 A. My testimony will demonstrate the need for the Project. Mr. Mennes will  
14 further emphasize the need to locate the Project in a separate ROW to  
15 continue to provide reliable service to FPL's customers in the area south  
16 of Fort Myers, including the Naples load center.

17

18 **OVERVIEW OF FPL**

19 **Q. Please provide a brief description of FPL.**

20 A. FPL provides electric service to more than 4 million customers in 35  
21 Florida counties. In approximate terms, FPL's service territory includes  
22 the east coast of Florida beginning in Miami-Dade County in southeast  
23 Florida and running north to Nassau County in northeast Florida, as well

1 as a large portion of southwest Florida beginning in Collier County and  
2 running north through Manatee County.

3

4 **Q. Please describe FPL's existing load characteristics and the**  
5 **composition of FPL's transmission network.**

6 A. FPL's existing load characteristics consist primarily of residential and  
7 commercial load with limited commercial/industrial load. A listing of  
8 FPL's forecasted peak load is provided in Attachment 2 of the Petition.  
9 FPL's actual summer peak load in 2002 was 19,219MW and the actual  
10 winter peak load in 2002-2003 was 20,190MW.

11

12 An overview of FPL's existing electrical transmission system is provided  
13 in Attachments 1a and 1b to the Petition. The area south of Fort Myers is  
14 bounded on the north by the Fort Myers Plant and the Orange River  
15 Substation, on the west by the Gulf of Mexico and on the east by the  
16 county lines of Collier and Lee. This area is referred to as the "Project  
17 Service Area." As shown in Attachment 1b, there are many transmission  
18 lines situated on an existing common ROW that deliver power from the  
19 Orange River Substation into the area south of Fort Myers, including the  
20 Naples load center. Two of the three 230kV lines on the existing common  
21 ROW run from the Orange River Substation all the way south to the  
22 Collier Substation. The Project would provide a third 230kV line from the  
23 Orange River Substation to the Collier Substation.



1        **DESCRIPTION OF PROJECT**

2        **Q.    Please describe the transmission line for which FPL is seeking a**  
3                **determination of need in this docket.**

4        A.    The Project consists of a transmission line connecting FPL's Collier and  
5                Orange River Substations.    The proposed transmission line will be  
6                constructed with a single pole design in a new ROW, and will have a  
7                design and operating voltage of 230kV.    Attachment 4 is a map showing  
8                the electrical facilities in the Project Service Area that currently exist (in  
9                black), a conceptual electrical connection for the Project (in blue), and  
10              other planned facilities in the general area (in red).    The locations on the  
11              map of facilities not yet in service are approximate.    In particular, the line  
12              depicting the Project is intended to indicate conceptually an electrical  
13              connection from the Orange River Substation to the Collier Substation  
14              strictly from an engineering and planning perspective, without regard to  
15              specific environmental and other considerations that will affect the actual  
16              siting of the Project.    The final length and routing of the line will depend  
17              on the result of further proceedings under the Transmission Line Siting  
18              Act ("TLSA") and the decision of the Governor and Cabinet, sitting as the  
19              Siting Board.

20

21        **Q.    What is FPL's timetable for licensing, design and construction of the**  
22                **Project?**

1 A. FPL presently is evaluating corridors in anticipation of submitting an  
2 application under the TLSA in the spring of 2003. The final action by the  
3 Siting Board is expected in the spring of 2004. Detailed design of the  
4 Project will begin as soon as a final corridor is approved. Construction is  
5 expected to begin in the fourth quarter of 2004 and to be completed by  
6 December 2005.

7  
8 **Q. Please summarize the need for and benefits associated with the**  
9 **Project.**

10 A. The need for the Project is driven by two primary considerations:

- 11 1. The need to serve the forecasted load growth in the Project Service  
12 Area in a reliable manner consistent with NERC Transmission  
13 System Standards.
- 14 2. The need for another electrical feed via a separate ROW path into  
15 the Project Service Area to reduce the impact of a loss of the  
16 transmission facilities in the existing common ROW.

17  
18 In addition, the Project will provide additional benefits. To the extent the  
19 Project is located in a separate ROW east of the existing common ROW  
20 that serves the Project Service Area, it could facilitate future long-range  
21 transmission expansion within the next 10 to 15 years to meet the expected  
22 load growth. Further, a new, geographically diverse ROW could  
23 minimize the need for additional ROW for future additional transmission

1 facilities, and also would allow for more efficient maintenance of the  
2 transmission facilities while mitigating the risk of an impact on reliability.  
3 Finally, placement of potential future long-range transmission expansion  
4 facilities on the new ROW would better distribute transmission capacity  
5 and further strengthen the reliability to FPL's customers.

6  
7 **Q. What is FPL's estimated capital cost of the Project?**

8 A. The final route has not been selected and final costs will be subject to a  
9 number of factors including the determination of the final length and route  
10 of the line as determined under the TLSA. Specifically, the length and  
11 route of the line, and other conditions that could be imposed through the  
12 TLSA process, will affect land acquisition costs, line construction costs,  
13 environmental permitting and mitigation costs, ROW preparation costs,  
14 and other compliance costs. The estimated capital cost of the Project,  
15 based on potential routes, is between \$23 million and \$41 million in 2003  
16 dollars. The corresponding range of present value revenue requirements is  
17 between \$32 million and \$57 million in 2003 dollars. This range of costs  
18 is the best available estimate at this time.

19  
20 **FPL'S PLANNING PROCESS**

21 **Q. Please describe FPL's transmission planning criteria.**

22 A. FPL plans its transmission system in accordance with the NERC  
23 Transmission System Standards. As described in more detail in

1 Attachment 5a of the Petition, NERC Transmission System Standards are  
2 divided into categories A, B, C, and D. Category A describes normal  
3 system conditions (all facilities in service). Category B describes the loss  
4 of a single facility, also known as a single contingency event. Category C  
5 describes the loss of two or more facilities. Category D describes outages  
6 due to an extreme event. Generally each category addresses the  
7 performance measures and standards of the system under different  
8 scenarios and circumstances.

9

10 **Q. Please describe FPL's transmission planning process.**

11 A. FPL conducts transmission studies each year to identify future  
12 transmission improvements needed to maintain acceptable transmission  
13 reliability. As further detailed in Section III and Attachment 5b of the  
14 Petition, the process essentially consists of three major steps: (1) the  
15 preparation of system models; (2) the assessment of the transmission  
16 system (i.e., does the system's performance comply with the four  
17 categories in the NERC Transmission System Standards); and (3) the  
18 development and evaluation of alternatives, and selection of the preferred  
19 project(s).

20

21 **Q. What analyses did FPL perform in determining the need for the**  
22 **Project?**

1       A.    In determining the need for the Project, FPL performed studies that  
2            revealed limitations on the existing 230kV and 138kV transmission  
3            network in the Project Service Area. In addition, FPL assessed ROW  
4            diversity. This assessment quantifies and compares the impact on  
5            customer outages of building the project on the existing ROW versus  
6            building the project on a separate ROW. Section IV of the Petition  
7            provides a more detailed description of this assessment.

8

9        **NEED FOR THE PROJECT**

10       **Q.    Please describe the existing and projected load in the Project Service**  
11            **Area.**

12        A.    The Project Service Area has become a major load center. As of January  
13            2003, FPL provided service to approximately 357,700 customers which  
14            equates to a population of approximately 594,900. These figures are  
15            expected to grow at a rate of approximately 11,300 new customers  
16            (approximately 18,800 people) per year. The growth rate for the Project  
17            Service Area represents an incremental load of approximately 68MW per  
18            year. FPL's 2002/2003 winter peak load occurred on January 24, 2003.  
19            On that date, the load in the Project Service Area, which includes the loads  
20            of both FPL and Lee County Electric Cooperative, was 2,156MW.  
21            Presently, the forecasted load of the Project Service Area for the winter  
22            peak of 2005/2006 is 2,352MW and the forecasted load for the 2006  
23            summer peak is 1,980MW. The load served by the existing transmission

1 facilities has reached the point where additional transmission capability is  
2 needed to maintain reliable electric service. The Project fulfills this need  
3 in the most reliable and effective manner.

4

5 **Q. Please summarize the need for the Project.**

6 A. The Project is needed to maintain the reliability of service and strengthen  
7 the reliability of the bulk transmission system in the Project Service Area.  
8 Based on the forecasted winter peak load for 2005/2006 and the forecasted  
9 summer peak load for 2006, the increase in load will result in the capacity  
10 of the existing transmission system out of the Orange River Substation  
11 into the Collier Substation to be exceeded under single contingency  
12 events, which, if not mitigated, would be non-compliant with NERC  
13 Transmission System Standards. The implementation of the Project will  
14 mitigate the single contingency overloads and low voltages that would  
15 occur without the Project. The Project also provides an important diverse  
16 path for electrical power to flow into the Project Service Area. This new  
17 path for power to flow on a geographically diverse ROW will significantly  
18 reduce the number of customers who would lose power and enhance the  
19 restoration of service to customers in the event of a loss of transmission  
20 facilities in a common ROW.

21

22 **Q. Please describe the contingencies that require the addition of the**  
23 **Project.**

1       A.     As outlined in Exhibit "A" of the Petition, we analyzed load flows for the  
2             year 2005/2006 winter peak load without any new transmission facilities  
3             in service. As referenced on Table 1 in Exhibit "A," these analyses  
4             indicate that for a single contingency event of any one of six 230kV  
5             transmission line sections within the common ROW in the Project Service  
6             Area could cause an outage for up to approximately 104,200 customers  
7             which equates to approximately 173,200 people. In addition, our analysis  
8             shows that overloads ranging from 102% to as high as 124% of the  
9             thermal MVA facility rating would occur under eleven separate  
10            contingencies. The NERC standards require that the facility ratings not  
11            exceed 100% of the applicable facility rating. The overloads would  
12            require the interruption of service of 7,200 to 41,100 customers  
13            (approximately 12,000 to 68,300 people), depending on the specific  
14            outage, in order to continue to operate the facilities in accordance with  
15            NERC Transmission System Standards.

16  
17       **Q.     How would construction of the Project resolve these contingencies?**

18       A.     The Project provides an additional 230kV injection into FPL's Collier  
19             Substation. The construction of the Project, based on a projected in-  
20             service date of December 2005, would mitigate the thermal overloads and  
21             low voltage conditions caused by single contingency events in accordance  
22             with NERC Transmission System Standards and would provide reliable

1 service to existing and new customers as the load in the Project Service  
2 Area continues to grow.

3

4 **Q. Why has FPL proposed that the Project be constructed on a separate**  
5 **ROW?**

6 A. This essential component of the Project is described more fully by Mr.  
7 Mennes in his direct testimony. As part of the planning process, FPL  
8 evaluates contingencies known as Category D events which I have  
9 previously described. In this case, most of the existing transmission  
10 facilities, including all of the existing 230kV transmission facilities used  
11 to serve the Project Service Area, are located on a common ROW between  
12 the Orange River and Collier Substations. In other words, the Project  
13 Service Area could be currently described as an electrical peninsula as  
14 shown in Exhibit No. \_\_\_ (WRS-1). This electrical peninsula receives  
15 power through several transmission lines that are subject to a collective  
16 outage arising through such events as a plane crash or tornado. Placing  
17 the new circuit in a separate ROW would provide the transmission system  
18 serving the Project Service Area with a diverse path for the transmission  
19 of power.

20

21 **Q. Did FPL determine the impact of the loss of the transmission facilities**  
22 **on the existing common ROW in the Project Service Area?**

23



1       A. [REDACTED]  
2       [REDACTED]  
3       [REDACTED]  
4       [REDACTED]  
5       [REDACTED]  
6       [REDACTED]  
7       [REDACTED]  
8       [REDACTED]  
9       [REDACTED]  
10      [REDACTED]  
11      [REDACTED]  
12      [REDACTED]  
13      [REDACTED]  
14      [REDACTED]  
15      [REDACTED]  
16      [REDACTED]  
17      [REDACTED]  
18      [REDACTED] In

19      addition, service unavailability to customers in the Project Service Area  
20      could be rotated. By having the ability to rotate service unavailability to  
21      customers within the Project Service Area, the majority of the customers  
22      would be without power for lesser periods of time until repairs are  
23      performed.

1       **Q.    What conclusions have you reached regarding the need for a separate**  
2           **ROW?**

3       A.    In my opinion, the construction of the Project on a separate ROW provides  
4           substantial reliability benefits and enhances the restoration of service to  
5           customers. It will serve to substantially reduce the number of customers  
6           that would lose power in the event a catastrophic event impairs the lines  
7           situated in the common ROW that serve the substantial (and rapidly  
8           growing) population in the Project Service Area. Moreover, the length of  
9           time a particular customer would be without power could be lessened  
10          since service unavailability could be rotated among some of the customers  
11          in the Project Service Area.

12  
13       **Q.    Are there other reliability and strategic benefits associated with the**  
14           **Project?**

15       A.    Yes, there are three primary additional benefits. First, the reliability risks  
16           associated with maintaining transmission facilities will be reduced.  
17           Maintenance of one transmission line could require that other transmission  
18           lines on a common ROW also be taken out of service to facilitate  
19           maintenance. Therefore, placement of the Project on a separate ROW  
20           would lessen the reliability impact of multiple transmission facilities being  
21           unavailable during maintenance periods, thereby lowering the possibility  
22           of customer outages during such periods.

23

1 Second, current load projections indicate that the load in the Project  
2 Service Area is expected to continue to grow, with substantial growth to  
3 the east of the existing transmission facilities in the common ROW. To  
4 serve this new load, it will be necessary to site new distribution  
5 substations to the east of the existing transmission lines. As depicted in  
6 Attachment 4 of Exhibit "A," several of these substations have been  
7 planned and others are under consideration. Transmission facilities will  
8 need to be rerouted and/or constructed in the future to the east of the  
9 existing common ROW in order to serve these substations. The  
10 establishment of a new ROW east of the existing common ROW provides  
11 an opportunity, subject to final ROW siting under the TLSA, for the more  
12 efficient and cost-effective integration of these new substations into FPL's  
13 transmission system to meet the expected load growth of the Project  
14 Service Area.

15  
16 Finally, FPL's load forecast for the Project Service Area indicates that the  
17 load will grow at an average rate of 3% per year for the next nine years.  
18 Developing a new ROW that may be able to accommodate another future  
19 transmission line when this need materializes will facilitate the long-range  
20 needs of the Project Service Area by providing opportunities for expansion  
21 of the transmission system with continued diversity of transmission  
22 routing.

23

1        **DISCUSSION OF ALTERNATIVES**

2        **Q.     Did FPL examine any alternatives to the Project?**

3        A.     Yes.

4

5        **Q.     What factors were employed to evaluate the alternatives?**

6        A.     The factors used to evaluate the performance of the alternatives included  
7           reliability, cost, construction feasibility, operational flexibility, ROW  
8           diversity, and compatibility with future transmission system expansion.

9

10       **Q.     Please summarize those alternatives and explain why they were  
11           rejected in favor of the Project.**

12       A.     FPL identified transmission improvements, as well as a generation  
13           alternative, that presented the potential to meet the load growth and  
14           reliability needs of the Project Service Area. Each of the alternatives that I  
15           will discuss below were found to be inferior to the Project when  
16           considered in light of the factors that I previously mentioned.

17

18           (1) Placement of Collier-Orange River 230kV #3 Project on Existing  
19           Common ROW -- This alternative would provide a 230kV transmission  
20           line into FPL's Collier Substation from the Orange River Substation using  
21           the existing common ROW that already contains numerous transmission  
22           lines. This alternative provides adequate voltage support and relieves  
23           single contingency thermal overloads. The estimated capital cost of this

1 alternative is projected to be \$17 million in 2003 dollars. The  
2 corresponding present value of revenue requirements is \$25 million in  
3 2003 dollars.

4

5 However, this alternative has several major drawbacks. First, it does not  
6 provide the reliability and service restoration benefits that, as I have  
7 previously discussed, are important for this major load center. Second, this  
8 alternative does not provide an opportunity for future expansion of FPL's  
9 transmission system to integrate and serve new distribution substations as  
10 the load increases in the eastern portion of the Project Service Area.  
11 Finally, this alternative would not address maintenance efficiency.

12

13 (2) Orange River-Collier 500kV Transmission Line - - Under this  
14 alternative, FPL would build a 500kV transmission injection into the  
15 Collier/Naples area. This project would require a new transmission ROW  
16 extending from a point along the existing Andytown-Orange River 500kV  
17 transmission line to a substation in the Collier area (approximately 25 to  
18 30 miles). The substation in the Collier area would require the installation  
19 of 500kV to 230kV transformation equipment, along with the routing of  
20 two of the existing Collier-Orange River 230kV transmission lines into the  
21 new substation. The estimated capital cost of this alternative is projected  
22 to be \$99 million in 2003 dollars. The corresponding present value  
23 revenue requirements is \$138 million in 2003 dollars. This alternative was

1 rejected due to the high cost, the inability to facilitate expansion of the  
2 transmission system to serve future distribution substations, and the  
3 increased likelihood of being unable to meet the necessary in service date  
4 of December 2005 due to the potential for increased permitting and  
5 construction schedules.

6  
7 (3) Alico-Orange River 230kV Transmission Line - - This alternative  
8 would introduce an additional 230kV transmission line from the Orange  
9 River Substation to the Alico Substation. This alternative does not fully  
10 comply with NERC Transmission System Standards because it would not  
11 relieve all of the thermal overloads and low voltages for two  
12 contingencies. Also, the voltage support for the Project Service Area  
13 would not be adequate for the more severe 230kV contingencies.  
14 Therefore, this is alternative was rejected.

15  
16 (4) Ft. Myers-Collier 138kV Transmission Line - - Under this alternative,  
17 FPL would construct an additional 138kV transmission line from FPL's  
18 Fort Myers Plant into FPL's Collier Substation. Like the Alico-Orange  
19 River alternative, this alternative does not comply with NERC  
20 Transmission System Standards. This alternative relieves only some  
21 minor single contingency thermal overloads and would not eliminate the  
22 more severe 230kV transmission overloads resulting from a single  
23 contingency events. Because this alternative will not relieve the thermal

1 overloads and low voltages from a single contingency, customer  
 2 interruptions may be necessary until the out-of-service transmission  
 3 facilities can be repaired. Also, the voltage support in the Project Service  
 4 Area would not be adequate for the more severe 230kV contingencies.  
 5 Therefore, this alternative was rejected.

6  
 7 (5) Siting Generation near the Naples load center - - FPL also considered  
 8 the alternative of siting new generation (2 combustion turbines) near the  
 9 Naples load center (e.g., Collier Substation). The estimated capital cost  
 10 (net present value) of this alternative is \$101 million in 2003 dollars.  
 11 Therefore, this alternative was rejected.

12  
 13 **ADVERSE CONSEQUENCES OF DELAY OR <sup>DENIAL</sup>~~DENIAL~~ OF THE**  
 14 **PROJECT**

15 **Q. Would there be adverse consequences to FPL’s customers in the Project**  
 16 **Service Area if the Project is not timely approved?**

17 **A.** Yes. If the Project is not timely approved and no other alternative is built,  
 18 inadequate transmission capability would result, thereby jeopardizing  
 19 reliable service to existing and future customers in this area as discussed in  
 20 Section IV of the Petition. Furthermore, the proposed Collier-Orange River  
 21 #3 transmission line should be constructed on a new ROW in order to  
 22 provide diversity of transmission capacity for the Project Service Area.

23

1       **Q. What would be the impact if certification of the Project were denied?**

2       A. If certification of the Project were denied, FPL would be required to address  
3       its customers' needs with a less reliable alternative and one that is not in the  
4       best long term interest of FPL's customers.

5  
6       **Q. Please summarize your testimony.**

7       A. The Project is needed by December 2005 to maintain the reliability of power  
8       supply into the Project Service Area. The other alternatives to address this  
9       situation are either too costly, do not provide the reliability needed, are not  
10      viable, or do not provide for the operation of the facilities within the rated  
11      thermal and voltage limits in the event of a single contingency consistent  
12      with NERC Transmission System Standards.

13  
14      In summary, the Project provides the following benefits: (i) provides the  
15      additional transmission capacity necessary to correct thermal overloads and  
16      low voltage conditions in accordance with NERC Transmission System  
17      Standards; (ii) increases the reliability of electric service in the Project  
18      Service Area by providing an alternative path to the Collier Substation  
19      resulting in diversity of transmission routing; (iii) provides an opportunity to  
20      accommodate the efficient integration and service to new distribution  
21      substations identified to serve projected load growth from existing and new  
22      customers in the Project Service Area in a reliable manner; and (iv)



1 facilitates and provides flexibility for the maintenance of existing  
2 transmission facilities located in the common ROW.

3

4 **Q. Should the Commission approve the need for the Project?**

5 A. Yes. The Commission should determine that there is a need for a 230kV  
6 transmission line connecting the Collier and Orange River Substations.  
7 Moreover, the Commission should recognize that there will be significant  
8 reliability and other benefits to the Project Service Area if the Project is  
9 located in a new, geographically-diverse ROW from the existing common  
10 ROW.

11

12 **Q. Does this conclude your direct testimony?**

13 A. Yes, it does.

1           MR. HOFFMAN: Moving to the prefiled direct testimony  
2 of Vicente Ordax, Jr., which consists of four pages. We have  
3 no changes or revisions to that testimony, and we would ask  
4 that Mr. Ordax's prefiled direct testimony be inserted in the  
5 record as though read.

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1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                   **FLORIDA POWER & LIGHT COMPANY**

3                   **DIRECT TESTIMONY OF**

4                   **VICENTE ORDAX, JR.**

5                   **DOCKET NO. 030084-EI**

6                   **FEBRUARY 26, 2003**

7

8

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

9

A.     My name is Vicente Ordax, Jr. My business address is 4200 West Flagler  
10           Street, Miami, Florida 33134.

11

12

**Q.     By whom are you employed and what is your position?**

13

A.     I am employed by Florida Power & Light Company ("FPL") as Supervisor  
14           of Local Area Planning.

15

16

**Q.     What are your responsibilities as Supervisor of Local Area Planning?**

17

A.     My responsibilities include the development and evaluation of  
18           transmission expansion plans utilizing load flow analysis. I have held this  
19           position and performed these responsibilities since September of 2001.

20

21

**Q.     Please briefly describe your educational and professional background.**

22

A.     I graduated with honors from the University of Florida with a Bachelor of  
23           Science degree in Electrical Engineering in August of 1986. I received a

1 Master of Science degree in Electrical Engineering from Florida  
2 International University in August of 1990. I am a registered professional  
3 engineer in the state of Florida. I have also attended seminars and short  
4 courses covering topics related to transmission planning.

5  
6 I have been employed by FPL since August of 1986 and have held several  
7 positions. Since 1991, my responsibilities in the Transmission Operation  
8 and Transmission Planning areas have included performing engineering  
9 work for FPL. In that capacity I have attained a high level of expertise in  
10 the performance of transmission load flow studies and other specialty  
11 studies. I have also represented FPL as a member of the Transmission  
12 Working Group of the Florida Reliability Coordinating Council  
13 responsible for performing the seasonal transmission assessments.

14  
15 **Q. Are you sponsoring any portion of the Petition?**

16 A. Yes. I am co-sponsoring the load flow diagrams (Appendices A & B) and  
17 the Load Flow Project Summary Table (Attachment 8) included in Exhibit  
18 "A" to FPL's Petition for Determination of Need for the Collier-Orange  
19 River #3 Project ("Project") filed with this Commission on February 26,  
20 2003.

21  
22 **Q. What is the purpose of your testimony?**

1 A. The purpose of my testimony is to sponsor the results of the load flow  
2 studies reflected in the load flow diagrams included in Exhibit "A" to  
3 FPL's Petition which demonstrate the need for the Project.  
4

5 **Q. Were the load flow studies and resulting load flow diagrams**  
6 **prepared under your direct supervision and control?**

7 A. Yes.  
8

9 **Q Are the load flow analyses and corresponding diagrams presented in**  
10 **the Petition consistent with generally accepted engineering practices**  
11 **and transmission planning criteria?**

12 A. Yes, they are.  
13

14 **Q. What are load flow diagrams and how are they used in utility**  
15 **transmission planning?**

16 A. Load flow diagrams show the electrical configuration of a transmission  
17 system. They are used to identify transmission facilities and the loading  
18 on those facilities for the specific condition being evaluated.  
19

20 **Q. Why were the load flow diagrams prepared?**

21 A. The load flow diagrams were prepared to show graphically the results of  
22 the load flow studies which demonstrate and support the need for the  
23 Project. The load flow studies and corresponding diagrams evaluated the

1 transmission system performance during winter and summer peak load  
2 conditions under single contingency events. The results of the studies for  
3 the Project are summarized in Attachment 8 to the Petition and discussed  
4 by Mr. Schoneck in his direct testimony.

5

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

7 A. Yes, it does.

1 CHAIRMAN JABER: The prefiled direct testimony of  
2 Vincente Ordax, Jr., shall be inserted into the record as  
3 though read.

4 MR. HOFFMAN: And then finally, Madam Chairman, we,  
5 we have both prefiled direct and rebuttal testimony of  
6 C. Martin Mennes. And in connection with the prefiled direct  
7 testimony of Mr. Mennes, we have a correction on Page 6, Line  
8 4. The word "cost" should be "coast," C-O-A-S-T.

9 CHAIRMAN JABER: We don't get to put Mr. Mennes on  
10 the stand?

11 MR. HOFFMAN: Perhaps not, Madam Chairman, if you  
12 accept our stipulation.

13 And with that change, we would ask that Mr. Mennes'  
14 prefiled direct testimony be inserted into the record as though  
15 read.

16 CHAIRMAN JABER: The prefiled direct testimony of  
17 C. Martin Mennes shall be inserted into the record as though  
18 read with the correction to Page 6, Line 4.

19 MR. HOFFMAN: Thank you, Madam Chairman.  
20  
21  
22  
23  
24  
25

1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
2                   **FLORIDA POWER & LIGHT COMPANY**  
3                   **DIRECT TESTIMONY OF C. MARTIN MENNES**  
4                   **DOCKET NO. 030084-EI**  
5                   **FEBRUARY 26, 2003**

6

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

8           A.     My name is C. Martin Mennes. My business address is 4200 West Flagler St.,  
9                   Miami, Florida 33134.

10

11          **Q.     By whom are you employed and what is your position?**

12          A.     I am employed by Florida Power & Light Company ("FPL") as Vice  
13                   President, Transmission Operations and Planning.

14

15          **Q.     Please describe your duties and responsibilities as Vice President,**  
16                   **Transmission Operations and Planning.**

17          A.     I am responsible for FPL's bulk and regional transmission planning and  
18                   transmissions system operations. This includes responsibility for the  
19                   reliability and security of the FPL transmission system. In this regard, I have  
20                   overall responsibility for the formulation of transmission expansion plans such  
21                   as the project for which a determination of need is being sought from this  
22                   Commission.

23



1       **Q.    Please describe your educational background, business experience, and**  
2       **professional associations.**

3  
4       A.    I graduated with honors from the University of Florida in 1968 with a  
5       Bachelor of Science degree in Electrical Engineering. I earned a Post-  
6       Graduate Certificate of Proficiency in Electrical Engineering from the  
7       University of Miami in 1974, and completed the Program for Management  
8       Development from the Harvard University Graduate School of Business in  
9       1981. I am a registered Professional Engineer in the State of Florida. I began  
10      working at FPL in 1968 in the area of protective relay and control systems.  
11      Since then I have held the positions of Manager of System Protection,  
12      Manager of System Operations, Manager of Bulk Power Markets, and  
13      Director of Power Supply. In February 2000 I assumed my present position.  
14      My industry-related activities include serving as the chair of the following  
15      organizations: North American Electric Reliability Council ("NERC")  
16      Performance Subcommittee, NERC Security Coordinator Subcommittee,  
17      Southeastern Electric Reliability Council ("SERC") Operating Committee,  
18      and the Florida Regional Coordinating Council ("FRCC") Operating  
19      Committee. In addition, I am presently serving as vice chair for the NERC  
20      Market Interface Committee, and I am on the NERC Technical Steering  
21      Committee. I also have worked on numerous NERC committees and  
22      taskforces including the Transmission Transfer Capability Taskforce, and the  
23      Electronic Information Network Taskforce.

1       **Q.     What is the purpose of your testimony in this proceeding?**

2       A.     The purpose of my testimony is to support FPL's Petition for a Determination  
3             of Need for the Project as identified and described in FPL's Petition.  
4             Specifically, I explain the importance of establishing a new 230kV  
5             transmission line into the Naples load center in a new, separate right-of-way  
6             ("ROW").

7

8       **Q.     Are you sponsoring any portion of the Petition?**

9       A.     Yes, I am jointly sponsoring Attachment 6 of Exhibit "A" to the Petition with  
10            Mr. Schoneck.

11

12       **Q.     Please describe the area that will be served by the Project and the existing  
13             transmission facilities that provide electric service into this area.**

14       A.     The "Project Service Area," as shown on Attachment 1b, includes the area  
15             south of Fort Myers bounded on the north by the Fort Myers Plant and Orange  
16             River Substation, on the west by the Gulf of Mexico, and on the east by the  
17             county lines of Collier and Lee. The Project Service Area currently can be  
18             described as an electrical peninsula. As of January 2003, FPL served  
19             approximately 357,700 customers (an approximate population of 594,900) in  
20             the Project Service Area. This area is considered a major load center and the  
21             load is projected to continue to grow at a rate of approximately 11,300  
22             customers or 68MW per year.

1       **Q.     Please summarize why a separate ROW is needed.**

2       A.     A separate ROW is needed to mitigate the adverse consequences resulting  
3             from the loss of all transmission facilities in the existing, common ROW.  
4             Loss of all transmission facilities in a common ROW means that all the  
5             transmission lines within the ROW have been de-energized due to an event  
6             causing damage to the lines or structures within the ROW such as plane  
7             crashes, severe weather such as tornadoes, or fires. [REDACTED]

8             [REDACTED]  
9             [REDACTED]  
10            [REDACTED]  
11            [REDACTED]  
12            [REDACTED]  
13            [REDACTED]  
14            [REDACTED]  
15            [REDACTED]  
16            [REDACTED]

17            [REDACTED] To mitigate the consequences of losing all the  
18            transmission facilities in the common ROW, FPL is proposing to construct the  
19            additional transmission feed in a geographically diverse ROW.

20

1       **Q.    Has the Company lost all transmission facilities in a common ROW in the**  
2       **past?**

3       A.    Yes, although an infrequent occurrence, FPL has lost all transmission facilities  
4       in a common ROW. In 1985, wildfires in the east coast 500kV ROW resulted  
5       in three 500kV circuits coming out of service. On August 27, 1998, a plane  
6       crash took out of service two 500kV circuits located on a common ROW  
7       north of Duval Substation in Duval County. On November 14, 1998, another  
8       plane crash took out of service two 115kV circuits located on a common  
9       ROW out of FPL's Volusia Substation in Volusia County. On April 17, 1999  
10      a fire in the 500kV ROW north of Andytown Substation took out of service  
11      multiple combinations of 500kV circuits at different times during the day. On  
12      February 16, 2001, a fire south of SR 60 in Indian River County took out of  
13      service two 500kV circuits located in a common ROW. Recently on February  
14      9, 2003, a single engine airplane clipped and damaged one transmission line  
15      and narrowly missed the four other lines located in a common ROW east of  
16      FPL's Andytown Substation in Broward County.

17

18      **Q.    What were the consequences of losing the transmission facilities in**  
19      **common ROWs noted above?**

20      A.    The incidents noted above resulted in a loss of the transmission facilities in  
21      question for periods of up to seventeen hours and involved significant  
22      operational and restoration challenges. For example, during the 17 hour repair  
23      of the two 500kV Duval circuits in the August 1998 event, it was necessary to

1 activate FPL's On Call Program statewide outside of normal On Call Program  
 2 hours in order to maintain system security. It became necessary to cycle off  
 3 air conditioners, pool pumps, and water heaters for prolonged periods of time.  
 4 The 1985 occurrence affecting the east ~~cost~~<sup>coast</sup> 500kV common ROW resulted in  
 5 a blackout of all of south Florida, interrupting service to roughly 1.5 million  
 6 customers for periods up to three hours. Subsequent to this event, an  
 7 additional 500kV line was placed into service on a geographically separate  
 8 ROW to mitigate the adverse consequences associated with a future loss of all  
 9 transmission facilities on the original 500kV ROW. The benefit of the new  
 10 diverse 500kV ROW was evidenced on April 17, 1999 when fires again de-  
 11 energized all of the lines on the original 500kV ROW. This time, the system  
 12 remained intact and no customers were affected. FPL seeks to build the  
 13 Collier-Orange River #3 Project in a separate ROW to meet a similar need.

14  
 15 **Q. What would be the consequences of losing the existing transmission ROW**  
 16 **between the Orange River and Collier Substations?**

17 A. The consequences of losing the existing transmission ROW between the  
 18 Orange River and Collier Substations would be quite severe. [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

1 **Q. Are these consequences acceptable?**

2 A. No. I do not believe that these are acceptable consequences. Because such a  
3 large and growing load center receives most of its electric service through a  
4 single ROW, the loss of all facilities in a common ROW, even though an  
5 infrequent occurrence, could result in severe consequences for the residential,  
6 commercial, and industrial customers in the Project Service Area. Simply  
7 stated, there are too many customers in the Project Service Area that currently  
8 rely upon transmission capability located within a common ROW to meet all  
9 of their electric service needs. In my opinion, such consequences should be  
10 mitigated to the extent reasonably practicable. FPL's customers expect  
11 reliable, cost effective electric service. Currently, the most reasonable and  
12 practicable means available to mitigate the impact of the loss of all  
13 transmission facilities in the existing common ROW is to install a new  
14 transmission feed into the Project Service Area in a new geographically  
15 diverse ROW.

16  
17 **Q. Please describe how such consequences could be mitigated by locating the**  
18 **new circuit in a separate ROW.**

19 A. With the addition of the new transmission circuit in a separate ROW, the  
20 consequences of losing a common transmission ROW due to severe weather  
21 or another major event are significantly reduced. [REDACTED]

22 [REDACTED]

23 [REDACTED]

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[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] Likewise, restoration efforts would be

significantly enhanced if the new circuit were to occupy a separate ROW. Not only would fewer customers experience an extended outage, but the availability of an additional feed into the Project Service Area would enable FPL to continue to provide service on a rotating basis to customers, thus significantly reducing the amount of time customers would be without service while restoration efforts are completed. Moreover, restoration efforts would be accelerated because the new circuit would not have been damaged.

As discussed in the Petition, most load centers are capable of being served from different sources via transmission facilities. However, this is not the case in the Project Service Area because there are no other major sources of power available in this area. Further, as Mr. Schoneck testifies, there is no generation alternative that could cost-effectively avoid the need for a new, geographically diverse transmission feed in this area. Placing the new line in the existing common ROW, while providing additional required transmission capacity into the area, would not provide the critical diversity benefits provided by a separate ROW into the Project Service Area.

1       **Q.     Has the risk of losing transmission facilities in a common ROW increased**  
2       **since the events of September 11, 2001?**

3       A.     While it is impossible to quantify the precise increase in the level of risk  
4       presented by possible terrorist activities in the post-September 11 world, I  
5       don't believe anyone would dispute the fact that risks of this nature have  
6       increased. Constructing the new transmission feed into the Project Service  
7       Area on a ROW separate from the existing transmission ROW, in my view, is  
8       a reasonable and appropriate measure to take to mitigate the consequences of  
9       an act of sabotage to transmission facilities in the existing common ROW.

10

11       **Q.     Should the Commission approve the need for the Project?**

12       A.     Yes, the Commission should determine that the Project is needed and provides  
13       significant reliability benefits to the Project Service Area by locating the  
14       Collier-Orange River #3 transmission line in a geographically diverse ROW.

15

16       **Q.     Does this conclude your direct testimony?**

17       A.     Yes, it does.

18

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1           MR. HOFFMAN: And finally we have the prefiled  
2 rebuttal testimony of Mr. Mennes, which consists of five pages.  
3 We have no changes or revisions, and we would ask that  
4 Mr. Mennes' prefiled rebuttal testimony be inserted into the  
5 record as though read.

6           CHAIRMAN JABER: Well, which is it: C. Martin Mennes  
7 or Martin C. Mennes?

8           The prefiled rebuttal testimony of Martin Mennes  
9 shall be inserted into the record as though read.

10          MR. HOFFMAN: Thank you.

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1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                               **FLORIDA POWER & LIGHT COMPANY**

3                               **REBUTTAL TESTIMONY OF C. MARTIN MENNES**

4                                       **DOCKET NO. 030084-EI**

5   **March 31, 2003**

6

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

8       A.     My name is C. Martin Mennes. My business address is 4200 West Flagler St.,  
9             Miami, Florida 33134.

10

11       **Q.     Are you the same C. Martin Mennes who previously filed direct testimony**  
12             **in this case?**

13       A.     Yes, I am.

14

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

16       A.     The purpose of my rebuttal testimony is to respond to the testimony submitted  
17             by Michel P. Armand, P.E. on behalf of Barron Collier Companies.

18

19       **Q.     Please respond to Mr. Armand's statements concerning the fact that a**  
20             **new 230kV transmission line into the Project Service Area was not**  
21             **identified in FPL's previous Ten-Year Site Plans.**

22       A.     A new 230kV transmission line was not listed in FPL's Ten-Year Site Plan  
23             prior to this year's Plan because such a line was not identified as the preferred

1 solution to mitigate certain overloads and voltage concerns in southwest  
2 Florida area until after April 2002 when FPL's last Ten-Year Site Plan was  
3 submitted. Prior to concluding that a new line was needed, FPL had been  
4 meeting the transmission needs of a growing population in the Project Service  
5 Area (as defined in FPL's Petition) through performing various upgrades and  
6 improvements to the existing transmission system. These upgrades and  
7 improvements have included:

- 8 ♦ Addition of transmission capacitor banks at Collier and Alico  
9 substations in 12/2000 and at Imperial Substation in 1/2002
- 10 ♦ Upgrade of the Alico-Metro 138kV line section in 1/2000
- 11 ♦ Upgrade of the Buckingham-Ft. Myers 138kV line in 6/2001
- 12 ♦ Upgrade of the Ft. Myers-Winkler 138kV line section in 12/2002
- 13 ♦ Construction of an alternate feed (Alico-Estero 138kV) to relieve the  
14 Alico-Collier 138kV #1 line in 12/2000
- 15 ♦ Construction of an alternate feed (Collier-Naples 138kV) to relieve the  
16 Alico-Collier 138kV #2 line in 6/2001

17 These types of improvements typically are less costly than adding a major  
18 230kV line and, therefore, were pursued first. In the summer of 2002, FPL  
19 concluded that it could no longer adequately address the growing overload  
20 and voltage concerns through the above-mentioned types of solutions and  
21 determined that it was necessary to add a new 230kV line from the Orange  
22 River Substation to the Collier Substation (as discussed in section IV part A.1

1 of Exhibit "A"). FPL made its final decision to construct the line in the fall of  
2 2002. The line is identified in FPL's 2003 Ten-Year Site Plan.

3

4 **Q. Please describe FPL's transmission planning cycle and explain why the**  
5 **need for the line was not identified earlier.**

6 A. FPL begins its transmission planning process by updating information on load,  
7 sited generation, and transmission data from the prior year (e.g., new  
8 transmission facilities and distribution stations). This occurs between January  
9 and April of each year. Based on these inputs to the transmission planning  
10 model, a transmission assessment is performed. This occurs during the  
11 months of May through July. The location of generation is critical and a  
12 major factor in the assessment and determination of transmission needs.  
13 Thus, because all generation may not have been identified in the Ten-Year Site  
14 Plan as sited, a reasonable transmission plan and planning horizon are limited  
15 by the known generation data. In recent years, the transmission assessment  
16 has looked forward through appropriate summer and winter peak periods  
17 occurring four to five years out. As Mr. Schoneck discussed in his direct  
18 testimony, during its 2002 assessment FPL identified the need for a new  
19 230kV transmission line into the Project Service Area based on the winter  
20 peak in 2005/2006.

21

22 **Q. Is Mr. Armand correct in his conclusion that FPL has adopted no loss of**  
23 **load due to the loss of facilities in a common corridor as a new planning**

1 **criterion?**

2 A. No, his conclusion is incorrect. FPL has adopted no such criterion. As  
3 reflected in the NERC Transmission Systems Standards, included on pp. 3-4  
4 in attachment 5a of Exhibit "A" to FPL's Petition, controlled loss of load is  
5 acceptable in extreme events that result in the loss of multiple facilities  
6 (NERC Category D event). As the NERC standard for a Category D event  
7 states, the "mitigation or elimination of the risks and consequences of these  
8 events shall be at the discretion of the entities responsible for the reliability of  
9 the interconnected transmission systems." FPL believes that placement of the  
10 new 230kV transmission line in a separate ROW is necessary to appropriately  
11 mitigate the potentially severe consequences associated with the loss of all  
12 transmission facilities in the existing common ROW. FPL's position in this  
13 respect should be clear from the petition and from the direct testimony filed  
14 by Mr. Schoneck and myself. See, for example, Mr. Schoneck's direct  
15 testimony at page 15 and my direct testimony at pages 7 and 8.

16 **Q. Mr. Armand suggests that other parts of the FPL bulk power supply**  
17 **system are more vulnerable to sabotage and other risks than co-located**  
18 **transmission lines. Please respond.**

19 A. I do not believe any appropriate purpose would be served in commenting  
20 specifically on this assertion. I would note simply that FPL has addressed and  
21 continues to address security risks throughout its bulk power supply system.  
22 The need for the Project is based on the unique characteristics of the Project  
23 Service Area and the bulk power system that serves this area. FPL has

1 identified a need for a new 230kV line into the Project Service Area and has  
2 determined that, given the peninsula-like characteristics of the transmission  
3 system in this area, the interests of FPL's customers are best served by placing  
4 the new transmission line in a new ROW geographically diverse from the  
5 existing ROW.

6  
7 **Q. Mr. Armand contends that the risk presented by locating the new 230kV**  
8 **transmission circuit in the existing common ROW does not justify the**  
9 **incremental cost of FPL's "proposed route." Please respond.**

10 A. I should clarify that, contrary to Mr. Armand's suggestion, FPL has not  
11 proposed a route for approval by this Commission. The route or location of  
12 the new line will be determined in a separate process under the Transmission  
13 Line Siting Act and approved by the Siting Board. It is true that placing the  
14 new line in a separate ROW will cost more than if it were placed in the  
15 existing ROW. However, in FPL's judgment, the mitigation of the risks and  
16 consequences of the loss of all of the transmission facilities in the existing  
17 common ROW is an important objective in light of the unique characteristics  
18 of the Project Service Area and is well worth the estimated incremental cost of  
19 the Project. FPL's recommendation is consistent with the NERC  
20 Transmission Standards for a Category D Event.

21  
22 **Q. Does this conclude your rebuttal testimony in this case?**

23 A. Yes, it does.

1 CHAIRMAN JABER: Exhibits?

2 MR. HOFFMAN: As far as exhibits go, Madam Chairman,  
3 let me begin with a document, which I provided a copy to the  
4 Commissioners and to the staff and to the court reporter.

5 It is FP&L's notice of filing the notices of this  
6 final hearing that were published in newspapers in areas where  
7 the proposed line could be placed together with the affidavits  
8 of publication, all of which are attached to the notice. And I  
9 would ask that this exhibit be marked and admitted into the  
10 record.

11 CHAIRMAN JABER: We'll identify FP&L's notice of  
12 filing notices of final hearing published in newspapers in area  
13 where proposed line could be placed and the affidavits of  
14 publication as a composite Exhibit Number 1.

15 MR. HOFFMAN: Thank you, Madam Chairman.

16 (Exhibit 1 marked for identification.)

17 MR. HOFFMAN: Secondly, Madam Chairman, we would ask  
18 that Exhibit A to FPL's petition for need determination  
19 including the attachments and appendices to Exhibit A to the  
20 petition be marked for identification and admitted into the  
21 record.

22 CHAIRMAN JABER: Attachment A -- I'm sorry. Exhibit  
23 A, which includes attachments and appendices to the petition  
24 for need, will be identified as composite Exhibit Number 2.

25 MR. HOFFMAN: Thank you, Madam Chairman.

1 (Exhibit 2 marked for identification.)

2 MR. HOFFMAN: Third, we have an exhibit to the  
3 prefiled direct testimony of Mr. Schoneck, which is premarked  
4 Exhibit WRS-1 entitled, Illustration Electrical Peninsula.

5 FP&L would ask that this document be marked for  
6 identification as Exhibit 3 and admitted into the record.

7 CHAIRMAN JABER: WRS-1 is identified as hearing  
8 Exhibit 3.

9 (Exhibit 3 marked for identification.)

10 MR. HOFFMAN: I believe those are all the exhibits we  
11 have, Madam Chairman.

12 CHAIRMAN JABER: Okay. Without objection, Exhibits  
13 1, 2 and 3 are admitted into the record.

14 (Exhibits 1, 2 and 3 admitted into the record.)

15 CHAIRMAN JABER: Mr. Hoffman, do you have anything  
16 further to bring to our attention?

17 MR. HOFFMAN: I do, Madam Chairman.

18 As a result of some discussions we had with the  
19 former intervenor in this case, FPL at this time would like to  
20 place on the record FPL's revised request for a ruling from  
21 this Commission. And what I'd like to do, Madam Chairman, with  
22 your permission is to essentially read that into the record.

23 CHAIRMAN JABER: Help me understand this. You want  
24 to modify your initial request?

25 MR. HOFFMAN: Yes, ma'am.



1 CHAIRMAN JABER: Okay. Go ahead and read into the  
2 record your request, and I may have questions after that.

3 MR. HOFFMAN: Yes, ma'am. FPL requests that the  
4 Commission enter a final order: First, that there's a need for  
5 the Collier-Orange River #3 project with the starting point at  
6 FPL's existing Orange River Substation in Lee County and the  
7 ending point at FPL's existing Collier Substation in Collier  
8 County.

9 Secondly, that the Commission final order reflect  
10 that the construction and operation of the Collier-Orange River  
11 #3 project will enhance electric system reliability and  
12 integrity and will improve the availability of low cost  
13 electrical energy within the State of Florida to assure the  
14 economic well-being of the citizens of the state.

15 And, third, Madam Chairman, that the location of the  
16 Collier-Orange River #3 project on a right-of-way that is  
17 geographically diverse from the existing common transmission  
18 right-of-way between the Orange River and Collier Substations  
19 will enhance electric system reliability, integrity and  
20 restoration of service more than location of the project on the  
21 existing common right-of-way. However, FPL is mindful that  
22 under the Transmission Line Siting Act the Siting Board could  
23 determine that location of all or a portion of the  
24 Collier-Orange, Collier-Orange River #3 project on the existing  
25 common right-of-way has the least impacts regarding the

1 criteria in Section 403.529(4), Florida Statutes.

2 The final determination of the most appropriate  
3 corridor route, considering all of the factors I specified in  
4 Section 403.529, Florida Statutes, will be made by the Siting  
5 Board under the Transmission Line Siting Act.

6 And that concludes, Madam Chairman, our revised  
7 request for relief from this Commission.

8 CHAIRMAN JABER: Mr. Hoffman, walk me through what  
9 the differences are between your revised request and the  
10 original request. That may -- certainly that's helpful to me.  
11 It may be helpful to the other Commissioners.

12 And then you are not offering that as a stipulation  
13 of the issues in the prehearing order. This is a modification  
14 to the issues in the prehearing order.

15 MR. HOFFMAN: Yes, ma'am. It is effectively a  
16 modification of our request for relief as originally set forth  
17 in our petition.

18 And in a nutshell, Madam Chairman, the difference  
19 between the two is that in our original petition we requested  
20 that the Commission make a need determination not only of the  
21 need for a new 230kV transmission line between the Orange River  
22 Substation and the Collier, and the Collier Substation, but  
23 that the need determination be that the new 230kV transmission  
24 line be placed on a separate right-of-way.

25 The issues that arose, Madam Chairman and

1 Commissioners, was some question as to the extent of the  
2 Commission's authority to include in this what I'll call  
3 packaged need determination the finding concerning the separate  
4 right-of-way.

5           We obviously felt and feel that the Commission has  
6 that authority. But to resolve concerns of some interested  
7 folks regarding that, we went ahead and agreed to amend our  
8 request for relief so that now we're asking that the Commission  
9 find that there is a need for the new 230kV transmission line  
10 between the Orange River and Collier substations, and that the  
11 Commission also independently find that the location of the new  
12 line on a geographically diverse right-of-way that is diverse  
13 from the existing common right-of-way will enhance electric  
14 system reliability, integrity and restoration of service more  
15 than placing it on the existing right-of-way.

16           CHAIRMAN JABER: With respect to your modification on  
17 the, the location of the right-of-way, this modification is  
18 consistent with the stipulation the Commission accepted at the  
19 start of this hearing.

20           MR. HOFFMAN: Yes, ma'am. That language is entirely  
21 consistent with the recognition of the jurisdiction of the  
22 Siting Board.

23           CHAIRMAN JABER: Okay. So your modification to the  
24 application for need is a direct result of the stipulation you  
25 entered into with Mr. Wright and that we just approved?

1 MR. HOFFMAN: I think that that's a fair  
2 characterization, Madam Chairman.

3 CHAIRMAN JABER: Commissioners, do you have questions  
4 with respect to the modification?

5 I do have one question of staff in terms of  
6 procedure, but certainly want to entertain whatever questions  
7 the Commission has.

8 Staff, with respect to procedure, do you envision  
9 we'll just go issue by issue and you'll modify your  
10 recommendation in light of the company's modification?

11 MR. HARRIS: Yes, ma'am, that was our intention.

12 MR. HOFFMAN: Madam Chairman, excuse me.

13 CHAIRMAN JABER: Go ahead, Mr. Hoffman.

14 MR. HOFFMAN: Before you move to staff, I just wanted  
15 to add for the record that with the withdrawal of Barron  
16 Collier from the proceeding, we believe that our petition and  
17 testimony as stipulated in are uncontroverted so that the  
18 circumstances of this proceeding are such that we believe it's  
19 appropriate that the Commission issue a bench decision granting  
20 our petition as revised in terms of our request for relief, and  
21 we would very respectfully request that the Commission do so.

22 CHAIRMAN JABER: Commissioners, I did envision,  
23 frankly, a bench decision in this case, but we can certainly  
24 talk about that and whatever questions you have.

25 Commissioner Davidson, you had a question?

1 COMMISSIONER DAVIDSON: I'm in agreement with your  
2 comment. But I would -- I don't have a copy of the revised  
3 request. Would it be possible to get that? Thanks.

4 CHAIRMAN JABER: And, Mr. Hoffman, I don't either. I  
5 was frantically writing. Yeah. I guess none of us do. I was  
6 writing down notes as you were speaking.

7 COMMISSIONER DEASON: Madam Chairman, I had a  
8 question, but I think Mr. Hoffman anticipated that.

9 My question was going to be that based upon the  
10 evidence that is in the record now that's in front of us, it's  
11 uncontroverted that, that the, the geographic diverse location,  
12 while it's not perhaps within our jurisdiction to order it,  
13 that it is correct that it would enhance reliability and  
14 improve restoration. That -- right now there's no evidence to  
15 the contrary in this record; is that correct?

16 MR. HOFFMAN: Correct.

17 CHAIRMAN JABER: Commissioners, do you have any other  
18 questions?

19 Are there objections, Commissioners, or concerns with  
20 entertaining oral recommendations from staff and ruling on this  
21 issue from the bench?

22 As you know, generally speaking I tend to favor that  
23 when there is a case, certainly when there is a case that is  
24 stipulated, as this one is, and where staff is ready to offer  
25 oral recommendations. I think it expedites our process and

1 hopefully sends a strong signal to stakeholders and to our  
2 staff that this is the way cases should be.

3 COMMISSIONER BRADLEY: As a matter of fact, Madam  
4 Chair, I was even, prior to the time Mr. Hoffman made mention  
5 of the, of his suggestion that we have a bench decision, I was  
6 going to suggest that. So there is no opposition from this  
7 Commissioner, and I would be strongly in favor of having a  
8 bench decision today.

9 CHAIRMAN JABER: Okay. Thank you, Commissioner  
10 Bradley.

11 Mr. Hoffman, were there any other matters you wanted  
12 to bring to our attention before I move to staff?

13 MR. HOFFMAN: No, ma'am.

14 CHAIRMAN JABER: Thank you.

15 Mr. Harris, what do you think? Do you -- are you  
16 ready to make a recommendation on the issues we have in front  
17 of us in this proceeding or do you need a break?

18 MR. HARRIS: We are almost ready. We do have a  
19 composite exhibit we would like to introduce also on behalf of  
20 staff.

21 CHAIRMAN JABER: Let's do that, and then I'll break  
22 for you.

23 MR. HARRIS: Essentially -- and I'm not sure that we  
24 need a break, if I could have a mere second to confer with my,  
25 my staff.

1           But the composite that we're handing out is  
2 essentially three documents. It's a portion of Mr. Schoneck's  
3 deposition that was taken this past Friday. It's a portion of  
4 Mr. Mennes' deposition which was taken yesterday. And then it  
5 is the responses FPL provided to staff's interrogatories  
6 numbers 1 through 6. It is not the complete text of the  
7 depositions taken Friday or Monday. It's staff's portion of  
8 that where we asked questions of the witnesses. It does not  
9 include the questions asked by Barron Collier or the redirect  
10 or recross, however it's characterized, by FPL. And I don't  
11 believe there's any objection by FPL for that.

12           MR. HOFFMAN: No objections.

13           CHAIRMAN JABER: Mr. Harris, there's no objection to  
14 staff's composite exhibit. So staff's composite exhibit that  
15 consists of the deposition of Mr. Schoneck, the deposition of  
16 Mr. Mennes and FP&L's responses to staff's interrogatories  
17 1 through 6 will be identified as composite Exhibit 4 for  
18 purposes of this hearing and will be admitted into the record.

19           (Exhibit 4 marked for identification and admitted into  
20 the record.)

21           MR. HARRIS: I believe the technical staff had had an  
22 opportunity, I believe, to integrate Mr. Hoffman's announcement  
23 and are, I believe, prepared to proceed with an oral  
24 recommendation at this time. And we could go either issue by  
25 issue or make an entire recommendation. We would, we would

1 prefer to go issue by issue.

2 CHAIRMAN JABER: Thank you. Let's start with Issue  
3 1.

4 MR. HAFF: Thank you, Commissioners.

5 Issue 1: Is there a need for Florida Power & Light  
6 Company's proposed Collier-Orange River 3 project given the  
7 need for electric system reliability and integrity, as that  
8 phrase is used in Section 403.537, Florida Statutes?

9 Staff recommends: Yes. FPL's planning studies  
10 indicate that additional transmission capability will be needed  
11 by December 2005 between Ft. Myers and Naples to alleviate  
12 potential overloads and low voltage conditions from a single  
13 contingency event. If FPL does not add new transmission  
14 capability in the region by this time, overloads ranging from  
15 102 percent to 124 percent of the thermal line rating are  
16 forecasted under 11 separate single contingencies. Depending  
17 on the specific outage or contingency, service interruption may  
18 occur to between 7,200 and 41,100 electric customers.

19 Staff recommends that the single contingency  
20 violations identified by FPL would be satisfied whether a line  
21 is constructed in a new right-of-way or within the existing  
22 Collier-Orange River corridor. Construction of a new line  
23 within the existing corridor could leave the Naples load center  
24 vulnerable to a multiple contingency event affecting the  
25 existing entire corridor. FPL's proposal to build the



1 Collier-Orange River #3 project in a new corridor would  
2 mitigate such an event. The Transmission Line Siting Board  
3 will make the final corridor selection for FPL's proposed  
4 transmission line.

5 CHAIRMAN JABER: Mr. Haff, if I could interrupt you  
6 for just a minute.

7 I neglected to state for the record that we are in  
8 the part of this proceeding where staff is offering a  
9 recommendation to a posthearing decision, so at this point  
10 participation is limited to staff and the Commission.

11 MR. HAFF: Okay. Issue 2: Is --

12 MR. HARRIS: Did you all want to vote on Issue 1 or  
13 proceed with all the issues?

14 COMMISSIONER BAEZ: Move Issue 1.

15 CHAIRMAN JABER: Commissioners, do you have any  
16 questions on staff's recommendation or a motion?

17 COMMISSIONER BAEZ: I can move.

18 CHAIRMAN JABER: There's been a motion to approve  
19 staff on Issue 1.

20 COMMISSIONER BRADLEY: Second.

21 CHAIRMAN JABER: And a second. All those in favor,  
22 say aye.

23 (Unanimous affirmative vote.)

24 CHAIRMAN JABER: Issue 1 is approved.

25 MR. HAFF: Okay. Issue 2: Is there a need for

1 Florida Power & Light Company's proposed Collier-Orange River  
2 3 Project given the need for abundant, low cost electrical  
3 energy to assure the economic well-being of the citizens of the  
4 state, as that phrase is used in Section 403.537, Florida  
5 Statutes?

6 Staff recommends: Yes. FPL evaluated five  
7 alternatives to the proposed Collier-Orange River #3 project.  
8 Four of these alternatives were transmission projects in the  
9 Ft. Myers-Naples region, while one alternative was the  
10 construction of new generation near the Naples load center.  
11 One of the alternatives was the placement of the Collier-Orange  
12 River 3 line in the existing common right-of-way. It was the  
13 least cost alternative (\$25 million in net present value  
14 dollars for 2003.) As discussed previously, this alternative  
15 alleviates single contingency overloads. FPL had rejected this  
16 alternative due to concerns with serving what amounts to an  
17 electrical peninsula via a single corridor and to the inability  
18 for future expansion of FPL's transmission system to the east  
19 of the existing corridor.

20 By mitigating the forecasted single contingency  
21 violation for 2005, the line would assure the economic  
22 well-being of the citizens of the state by minimizing the  
23 region's exposure to single contingency events. The net  
24 present value cost of the project proposed by FPL in a new  
25 right-of-way is estimated between \$32 million and \$57 million

1 in 2003 dollars, and that is subject to the final right-of-way  
2 routing and conditions of certification by the Transmission  
3 Line Siting Board. The other four alternatives were either  
4 more costly with a net present value of between \$101 million  
5 and \$138 million or did not meet undervoltage or thermal  
6 overload conditions under all single contingency events.

7 That's staff's recommendation on Issue 2.

8 CHAIRMAN JABER: Thank you. Commissioners, questions  
9 on staff's recommendation?

10 COMMISSIONER BRADLEY: I would -- I have no  
11 questions.

12 CHAIRMAN JABER: You had a question, Commissioner  
13 Baez?

14 COMMISSIONER BAEZ: Well, I'm wondering as part of  
15 the recommendation what the significance of the specific  
16 alternatives are. Are they just for informational purposes?

17 MR. HAFF: Of the five alternatives to the proposal?

18 COMMISSIONER BAEZ: Yeah.

19 MR. HAFF: Would you just like a description of what,  
20 what the alternatives are?

21 COMMISSIONER BAEZ: Uh-huh.

22 MR. HAFF: Okay.

23 CHAIRMAN JABER: No.

24 COMMISSIONER BAEZ: No. I mean, you're giving us a  
25 recommendation ultimately that, yes, there is a need pursuant

1 to when you match it up against statutory requirements. And,  
2 and I guess if we spent a good part of the beginning of the  
3 hearing clarifying for all that it is not our, it is not within  
4 our jurisdiction or it's not our job anyway to approve a  
5 specific route --

6 MR. HAFF: Right.

7 COMMISSIONER BAEZ: I'm -- I guess I'd like to  
8 understand what significance are the alternatives in terms of  
9 routes? I mean, you spoke a little bit about the different  
10 alternatives.

11 MR. HAFF: Right.

12 COMMISSIONER BAEZ: And I guess what is our, what are  
13 we approving by your mentioning these?

14 MR. HAFF: Well, we're recommending that there's a  
15 need for a transmission line, a 230kV line between Orange River  
16 and Collier. And the alternatives had specific costs or some  
17 other alternatives did not meet the single contingency  
18 criterion.

19 The project as proposed by FPL has a range of costs.  
20 The alternatives other than building in the existing corridor  
21 were either more costly or didn't meet the criterion.

22 COMMISSIONER BAEZ: Right.

23 MR. HAFF: It was -- as FPL found, it was less costly  
24 to build this needed line in the existing corridor. It's our  
25 recommendation that building in the existing corridor would

1 satisfy single contingency concerns. The question is whether  
2 building in a new corridor is more preferable.

3 COMMISSIONER BAEZ: And we've already -- and I guess  
4 we've already addressed that evaluation in Issue 1.

5 MR. HAFF: Yes.

6 COMMISSIONER BAEZ: Okay.

7 CHAIRMAN JABER: Commission Davidson?

8 COMMISSIONER DAVIDSON: Thank you, Chairman.

9 To what extent will the language in subparagraph (B)  
10 of the revised request that Mr. Hoffman brought up to us be  
11 reflected in the order? Will this exact language be used? Are  
12 we making a finding as to (B) and, if so, can you discuss a  
13 little bit your comfort with the fact that we've got evidence  
14 in the record to make the finding?

15 MR. HARRIS: Commissioner, you -- the Commission  
16 will, of course, issue the order it feels appropriate. I  
17 believe at this point the order that I was intending to draft  
18 and present to the Commission for approval would include some  
19 language in the findings portion, the body of the order, and it  
20 would probably be substantially similar to the language  
21 Mr. Hoffman read and that was handed out to you.

22 I have not heard the Commission's vote yet and so, of  
23 course, I don't know what the order would say. And you-all  
24 will issue the order and have final control. The order that I  
25 would propose to you will probably include language similar to

1 what was suggested in order to clarify that when the ordering  
2 paragraph grants the petition, what is being granted is the  
3 petition subject to these modifications. We would want that to  
4 be explicitly clear in the body of the order and in the  
5 ordering paragraph itself.

6 COMMISSIONER DAVIDSON: Thanks.

7 CHAIRMAN JABER: But isn't, isn't (B) consistent with  
8 what you recommended for this issue?

9 MR. HARRIS: Yes.

10 CHAIRMAN JABER: Okay.

11 MR. HARRIS: Very much consistent.

12 CHAIRMAN JABER: Okay. You just confused me when you  
13 said you'd include findings similar to the language. The  
14 findings will reflect our approval or, or not of your  
15 recommendation; right?

16 MR. HARRIS: That is correct.

17 CHAIRMAN JABER: Okay.

18 MR. HARRIS: I don't want to commit, unless I'm told  
19 to by the Commission, to using this exact language as proposed  
20 by FPL. Of course, we'll draft the order that the Commission  
21 wants to issue.

22 COMMISSIONER DAVIDSON: Fine. And I hope I didn't  
23 cause confusion here.

24 CHAIRMAN JABER: No.

25 COMMISSIONER DAVIDSON: I just wanted to, to make

1 certain that you were familiar with the language in (B), and  
2 ask whether or not you feel we've got evidence to support that  
3 finding.

4 MR. HARRIS: Absolutely. Staff has reviewed that,  
5 and we do believe the record evidence in this case supports  
6 that finding.

7 COMMISSIONER DAVIDSON: Perfect. Thank you.

8 CHAIRMAN JABER: Okay. And, Commissioner Bradley,  
9 you were ready to make a motion to approve staff's  
10 recommendation?

11 COMMISSIONER BRADLEY: Yes, I most certainly was.  
12 And I will formally make my motion, and that is that we approve  
13 staff's recommendation as it relates to Issue 2.

14 CHAIRMAN JABER: Thank you, Commissioner. And a  
15 second?

16 COMMISSIONER DAVIDSON: Second.

17 CHAIRMAN JABER: All those in favor, say aye.

18 (Unanimous affirmative vote.)

19 CHAIRMAN JABER: Issue 2 is approved.

20 Issue 3.

21 MR. HAFF: Issue 3: Are Florida Power & Light  
22 Company's Collier and Orange River electrical substations the  
23 appropriate starting and ending points of the proposed Collier-  
24 Orange River #3 project as required by Section 403.537, Florida  
25 statutes?

1           Staff recommends: Yes. The Collier Substation is  
2 adjacent to the Naples load center, while the existing Orange  
3 River Substation is adjacent to FPL's Ft. Myers generating  
4 station. In addition, the Orange River Substation is connected  
5 to the rest of FPL's electric system via existing 500kV and  
6 230kV transmission lines. And that's our recommendation on  
7 Issue 3.

8           CHAIRMAN JABER: Okay. And similar to the question  
9 Commissioner Davidson just asked you on Issue 2 I have on Issue  
10 3. And I guess, Commissioners, we should also talk about  
11 what's required in this order.

12           I feel strongly with respect to articulating our  
13 understanding in the order about our jurisdiction and what we  
14 believe the jurisdiction of the Siting Board is, and I think  
15 that's easy to do with respect to we've approved the  
16 stipulation that speaks to that point and I think this issue  
17 speaks to that point.

18           So my request, Commissioners, is you make the motion  
19 on Issue 3 and, staff, as you draft the order, that we are real  
20 clear on that. I don't want this order misunderstood. I think  
21 we should articulate the requirements under 403 for the  
22 Commission and those should be our findings of fact and  
23 conclusions of law. But there needs to be a section on  
24 jurisdiction and I don't care how you get there. I don't care  
25 if you use the stipulation in this issue to get there or, or it



1 deserves a separate section. But I don't want DEP and the  
2 Siting Board to misunderstand what we've done. We've complied  
3 with 403 and, and I think the Commissioners would agree that we  
4 recognize the ability of the Siting Board to ultimately decide  
5 the location or parts of the location for what we've referred  
6 to as point, the starting point and the ending point, Mr.  
7 Harris.

8 MR. HARRIS: Yes. I understand.

9 CHAIRMAN JABER: Okay. And as I look at sub (C) that  
10 was handed out by Mr. Hoffman, I think that's consistent with  
11 my desire to be clear on jurisdiction. And if that's your  
12 recommendation on Issue 3, I can be supportive.

13 COMMISSIONER DEASON: Just let me clarify. There  
14 will be language in the order though consistent with the  
15 stipulation that we approve that the diverse -- a diverse  
16 geographic route has advantages, but it's just that's as far as  
17 we will take it. Then that will be up to the Siting Board  
18 obviously to take that and balance all other interests in  
19 making its final determination.

20 CHAIRMAN JABER: Right. And what I'm suggesting,  
21 Commissioner Deason, is the entirety of what you said should be  
22 articulated in the order.

23 COMMISSIONER DEASON: Okay.

24 CHAIRMAN JABER: Commissioner Davidson, you had a  
25 question or a comment.

1 COMMISSIONER DAVIDSON: Actually a motion.

2 CHAIRMAN JABER: Okay. There are no other questions?  
3 Okay. A motion?

4 COMMISSIONER DAVIDSON: A motion that captures, I  
5 hope, the essence of, of what you articulated, Chairman, which  
6 would be a motion to approve staff on Item 3, with the caveat  
7 that they include in the draft order an articulation of the  
8 requirements under 403 that we're satisfying, a short section  
9 on jurisdiction which recognizes the authority of the Siting  
10 Board. And I would propose that we don't have -- a statement  
11 that we don't have specific authority necessarily to approve a  
12 specific route and include that part of Section 3 as revised  
13 that works with your finding.

14 CHAIRMAN JABER: Thank you, Commissioner Davidson.  
15 Question, Commissioner Bradley?

16 COMMISSIONER BRADLEY: Yes. And I -- just -- not a  
17 question but a statement. Well, sort of a question.

18 Doesn't subsection (C) capture pretty much though  
19 what your concerns are as well as Commissioner Davidson's  
20 concerns, or, or does it need to be cleared up, does the  
21 language need to be cleared up?

22 CHAIRMAN JABER: Commissioner Davidson, you may have  
23 to clarify for me. I think -- I thought your motion did  
24 reference sub (C) and that was part of your motion to accept  
25 this language. But obviously, you know, you can --

1           COMMISSIONER DAVIDSON: It did. And if sub (C)  
2 addresses the concerns that we've raised here, I think staff  
3 would, would have a fine order. And, if not, I would suggest  
4 to staff if there's an additional statement that needed to be  
5 added as to jurisdiction, add that.

6           MR. HARRIS: I think I understand the Commission's  
7 intent and can draft an order that'll meet that intent.

8           CHAIRMAN JABER: Okay. Commissioner Bradley, I think  
9 the language under (C) resolves Issue 3 and some. But I think  
10 in the abundance of caution, if staff believes there should be  
11 a separate issue on jurisdiction, I don't think there's  
12 anything wrong with that.

13           COMMISSIONER BRADLEY: I agree.

14           CHAIRMAN JABER: There is a motion by Commissioner  
15 Davidson.

16           COMMISSIONER BAEZ: Second.

17           CHAIRMAN JABER: And a second. All those in favor,  
18 say aye.

19           (Unanimous affirmative vote.)

20           CHAIRMAN JABER: Issue 3 is approved.

21           Issue 4.

22           MR. HAFF: Issue 4: Should the Commission grant  
23 Florida Power & Light Company's petition for determination of  
24 need for the proposed Collier-Orange River #3 project?

25           Staff recommends: Yes. The Collier and Orange River

1 electrical substations are the appropriate starting and ending  
2 points for the needed transmission line. A 230 kilovolt  
3 transmission line connecting the Collier and Orange River  
4 substations is needed to ensure electric substation reliability  
5 and integrity in Southwest Florida. A 230 kilovolt  
6 transmission line connecting Collier and Orange River  
7 substations is needed to provide abundant, low cost electrical  
8 energy to assure the economic well-being of the citizens of the  
9 state, particularly in Southwest Florida. The Transmission  
10 Line Siting Board will make the final corridor selection for  
11 FPL's proposed transmission line.

12 And that's our recommendation on Issue 4.

13 CHAIRMAN JABER: Commissioners, do you have questions  
14 on the recommendation or a motion?

15 COMMISSIONER BRADLEY: I would -- a motion, if there  
16 are no questions. Are there any questions?

17 CHAIRMAN JABER: No.

18 COMMISSIONER BRADLEY: I would move that we approve  
19 Issue 4 as proposed by staff.

20 CHAIRMAN JABER: There's been a motion to approve  
21 staff's recommendation on Issue 4. Second?

22 COMMISSIONER DAVIDSON: Second.

23 CHAIRMAN JABER: And a second. All those in favor,  
24 say aye.

25 (Unanimous affirmative vote.)

1 CHAIRMAN JABER: Issue 4 is approved.

2 Issue 5, staff.

3 MR. HARRIS: Issue 5 is should the docket be closed?

4 Staff's recommendation is yes.

5 CHAIRMAN JABER: Motion, Commissioners?

6 COMMISSIONER BAEZ: Move it.

7 COMMISSIONER DAVIDSON: Second.

8 CHAIRMAN JABER: There's been a motion and a second.

9 All those in favor, say aye.

10 (Unanimous affirmative vote.)

11 CHAIRMAN JABER: Issue 5 is approved.

12 This proceeding is concluded.

13 MR. HARRIS: I have one correction to make, if I

14 might, Madam Chairman.

15 CHAIRMAN JABER: Go ahead, Mr. Harris.

16 MR. HARRIS: On staff's composite exhibit the  
17 deposition transcripts that were introduced are the first  
18 version. They have not been read and signed by the FPL  
19 witnesses. And so I don't know if we need to reserve FPL's  
20 right to be able to have their witnesses read and sign the  
21 final depositions and then substitute, if there's any changes,  
22 the changes made for the ones that were introduced in staff's  
23 exhibit. This is not a posthearing recommendation.

24 CHAIRMAN JABER: Mr. Hoffman, do you want an  
25 opportunity to file an errata sheet?

1 MR. HOFFMAN: We would like that opportunity. We  
2 will get back with staff within the next day or two, if that  
3 works.

4 CHAIRMAN JABER: Okay. Composite Exhibit 4 will be  
5 used to, for staff's composite exhibit, which includes the  
6 deposition transcripts. And let the record reflect you have an  
7 opportunity to file the errata sheets.

8 Commissioner Bradley?

9 MR. HOFFMAN: Thank you.

10 COMMISSIONER BRADLEY: Yes. And before we conclude,  
11 I'd like to offer up the motion to have a bench decision made  
12 today by, by this body.

13 CHAIRMAN JABER: To --

14 COMMISSIONER BRADLEY: I thought you were about to  
15 say that we are concluding, and earlier I made the statement  
16 that, that I was going to make a motion for a bench decision.

17 CHAIRMAN JABER: Oh, you mean after the fact?

18 COMMISSIONER BRADLEY: And I'm just trying -- yes.  
19 And I'm just trying to figure out at what point and how do I  
20 appropriately get that, put that motion forward?

21 CHAIRMAN JABER: I think we don't have to. I think  
22 we just -- we moved, we moved into the bench decision phase and  
23 I closed the record. And we went through issue by issue, so I  
24 --

25 COMMISSIONER BRADLEY: Okay.

1 CHAIRMAN JABER: But, you know, Commissioner Bradley,  
2 you're right. And correct me next time in the future because  
3 probably the most appropriate way would have been to entertain  
4 the motion for a bench decision and move, you know, into that.  
5 But I sort of skipped that.

6 COMMISSIONER BRADLEY: Okay.

7 CHAIRMAN JABER: Staff, I wanted to take an  
8 opportunity to commend you for your hard work.

9 Mr. Walker, I guess you did a good job. Certainly  
10 you put a good team together.

11 Parties, thank you very much.

12 Commissioners --

13 MR. HARRIS: Madam Chairman, I do have one other  
14 clarification I'd like to make. I'm sorry.

15 CHAIRMAN JABER: You need to hurry it up.

16 MR. HARRIS: I'm sorry, Madam. On the  
17 confidentiality we granted earlier, just for the sake of  
18 clarification, the staff recommendation was going to be the  
19 standard 18 months. Since we had not specifically set a time  
20 line, I wanted to make that clear that the recommendation, the  
21 order would say 18 months, and perhaps give FPL an opportunity  
22 to object to that if they wanted to.

23 I don't -- staff does not recommend any additional  
24 time other than the statutory 18 months in this case.

25 CHAIRMAN JABER: Well, I ruled on the request for

1 confidentiality. So unless you plan on putting a ruling in the  
2 order you do that memorializes this vote, I should probably  
3 clarify that my ruling includes -- the materials will be  
4 returned in 18 months; is that what you want?

5 MR. HARRIS: Yes, ma'am.

6 CHAIRMAN JABER: Okay.

7 MR. HARRIS: Or will be held confidential for 18  
8 months.

9 CHAIRMAN JABER: Okay. So let the record reflect  
10 that the ruling on confidential classification includes a  
11 provision that the material will be held confidential for 18  
12 months.

13 MR. HARRIS: And that was my last interruption.  
14 Thank you.

15 CHAIRMAN JABER: Okay. This proceeding is concluded.  
16 (Proceeding concluded at 1:21 p.m.)

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1 STATE OF FLORIDA     )  
2 COUNTY OF LEON        )

## CERTIFICATE OF REPORTER

3  
4 I, LINDA BOLES, RPR, Official Commission  
5 Reporter, do hereby certify that the foregoing proceeding was  
6 heard at the time and place herein stated.

7 IT IS FURTHER CERTIFIED that I stenographically  
8 reported the said proceedings; that the same has been  
9 transcribed under my direct supervision; and that this  
10 transcript constitutes a true transcription of my notes of said  
11 proceedings.

12 I FURTHER CERTIFY that I am not a relative, employee,  
13 attorney or counsel of any of the parties, nor am I a relative  
14 or employee of any of the parties' attorneys or counsel  
15 connected with the action, nor am I financially interested in  
16 the action.

17 DATED THIS 10th DAY OF APRIL, 2003.

18  
19  
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22  
23  
24  
25  


LINDA BOLES, RPR  
FPSC Official Commission Reporter  
(850) 413-6734

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

Petition for Determination of Need for )  
Collier-Orange River 230 kV Transmission )  
Line in Collier, Hendry, and Lee Counties, )  
by Florida Power & Light Company. )

Docket No. 030084-EI

Filed: March 5, 2003

**FLORIDA POWER & LIGHT COMPANY'S  
NOTICE OF FILING  
NOTICES OF FINAL HEARING PUBLISHED  
IN NEWSPAPERS IN AREAS WHERE  
PROPOSED LINE COULD BE PLACED AND  
AFFIDAVITS OF PUBLICATION**

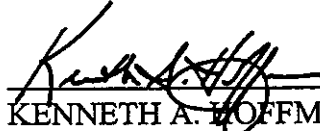
Florida Power & Light Company ("FPL"), by and through its undersigned counsel and pursuant to Rule 25-22.075(4), Florida Administrative Code, hereby submits the Notices of Final Hearing published in the following newspapers of general circulation in the areas where FPL's proposed Collier Orange-River #3 230 kV transmission line could be placed:

1. Ft. Myers News-Press - - published on February 20, 2003;
2. Naples Daily News - - published on February 20, 2003;
3. Hendry-Glades Sunday News - - published on February 16, 2003; and
4. The Clewiston News - - published on February 20, 2003.

The above-referenced Notices of Final Hearing and the Affidavits of Publication of such Notices are filed herewith as Composite Exhibit "A" to this Notice of Filing.

**FLORIDA PUBLIC SERVICE COMMISSION**  
DOCKET  
NO. 030084-EI EXHIBIT NO. 1  
COMPANY/  
WITNESS: FPL  
DATE: 04-08-03

Respectfully submitted,



KENNETH A. HOFFMAN, ESQ.  
Rutledge, Ecenia, Purnell & Hoffman, P.A.  
P. O. Box 551  
Tallahassee, Florida 32302  
Telephone: 850-681-6788  
Telecopier: 850-681-6515

-- and --

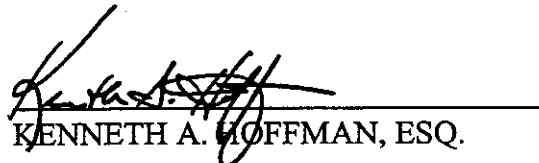
R. WADE LITCHFIELD, ESQ.  
Florida Power & Light Company  
Senior Attorney  
700 Universe Boulevard  
Juno Beach, Florida 33408-0420  
(561) 691-7101 (Telephone)  
(561) 691-7135 (Telecopier)

Attorneys for Florida Power & Light Company

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a copy of the foregoing was furnished by Hand Delivery to the following this 5<sup>th</sup> day of March, 2003:

Larry Harris, Esq.  
Division of Legal Services  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Room 370  
Tallahassee, Florida 32399-0850



KENNETH A. HOFFMAN, ESQ.

**COMPOSITE EXHIBIT "A"**

**NEWS-PRESS**

Published every morning - Daily and Sunday

Fort Myers, Florida

**Affidavit of Publication**

STATE OF FLORIDA  
COUNTY OF LEE

Before the undersigned authority, personally appeared **Kieanna Henry** who on oath says that he/she is the **Asst. Legal Clerk** of the News-Press, a daily newspaper, published at Fort Myers, in Lee County, Florida; that the attached copy of advertisement, being a **notice of hearing** in the matter of **Determination Hearing for Florida Public Service** Court was published in said newspaper in the issues of **February 20, 2003**

Affiant further says that the said News-Press is a paper of general circulation daily in Lee, Charlotte, Collier, Glades and Hendry Counties and published at Fort Myers, in said Lee County, Florida and that said newspaper has heretofore been continuously published in said Lee County, Florida, each day, and has been entered as a second class mail matter at the post office in Fort Myers in said Lee County, Florida, for a period of one year next preceding the first publication of the attached copy of the advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

*Kieanna Henry*

Sworn to and subscribed before me this

20th day of February, 2003 by

**Kieanna Henry**  
personally known to me or who has produced

as identification, and who did or did not take an oath.

Notary Public *Brenda Leighton*  
Print Name \_\_\_\_\_

My commission Expires:



Brenda Leighton  
MY COMMISSION # DD169005 EXPIRES  
February 14, 2007  
BONDED THRU TROY FAIR INSURANCE, INC.

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
NOTICE OF NEED DETERMINATION HEARING  
DOCKET NO. 030084-EI

**PETITION OF FLORIDA POWER & LIGHT COMPANY TO DETERMINE THE NEED FOR A PROPOSED 230 KV ELECTRICAL TRANSMISSION LINE**

Notice is hereby given that the Florida Public Service Commission will hold a public hearing in the above docket at the following time and place:

April 8-9, 2003, Beginning at 9:30 A.M.  
Florida Public Service Commission  
Easley Conference Center  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

**PURPOSE AND PROCEDURE**

The purpose of this hearing will be for a determination of need pursuant to Section 403.537, Florida Statutes (2002), for the construction of a 230 kV electrical transmission line. Segments of this 230 kV electrical transmission line may be located in Lee, Hendry and/or Collier Counties. The proposed electrical transmission line will start at FPL's Orange River Substation in Lee County and will terminate at FPL's Collier Substation in Collier County. The proceedings will be governed by the provisions of Chapter 120, Florida Statutes, Section 403.537, Florida Statutes, and Rules 25-22.075 and 25-22.076, Florida Administrative Code. Anyone wishing to become a party to the need determination proceeding should file an appropriate petition pursuant to Rule 25-22.039, Florida Administrative Code, with the Director, Commission Clerk and Administrative Services Division, at the following address:

Director, Commission Clerk and Administrative Services Division  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850  
Re: Docket No. 030084-EI

**PREHEARING CONFERENCE**

A prehearing conference will be conducted at the following time and place:

March 31, 2003 at 1:30 P.M.  
Florida Public Service Commission  
Easley Conference Center  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

The purpose of this prehearing conference will be to consider: (1) the simplification of the issues; (2) the identification of the positions of the parties on the issues; (3) the identification of witnesses and exhibits; (4) the establishment of an order of witnesses; (5) the possibility of obtaining stipulations concerning any matters at issue; and (6) the resolution of any remaining procedural matters that may aid in the disposition of the action.

**APPLICATION**

A copy of the Petition for Determination of Need and supporting exhibits will be available for public inspection during normal business hours at the following locations, beginning on or about February 26, 2003:

FLORIDA POWER & LIGHT COMPANY      FLORIDA POWER & LIGHT COMPANY  
1813 Lee Street, Ft. Myers, FL 33901      4105 15TH Avenue S.W., Naples, FL 34116

FLORIDA PUBLIC SERVICE COMMISSION  
Easley Conference Center  
2540 Shumard Oak Boulevard, Tallahassee, FL 32399-0850

**JURISDICTION**

Jurisdiction over Florida Power & Light Company and this action is vested in the Commission pursuant to Chapter 366, Florida Statutes and Section 403.537, Florida Statutes.

By direction of the Florida Public Service Commission.

Bianca S. Bayo, Director  
Commission Clerk and Administrative Services



an FPL Group company

**FPL**

NAPLES DAILY NEWS  
Published Daily  
Naples, FL 34102

## Affidavit of Publication

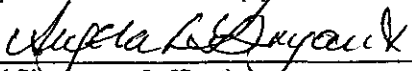
State of Florida  
County of Collier

Before the undersigned they serve as the authority, personally appeared Angela Bryant, who on oath says that they serve as the Administrative Assistant To The Publisher of the Naples Daily, a daily newspaper published at Naples, in Collier County, Florida; distributed in Collier and Lee counties of Florida; that the attached copy of the advertising, being a

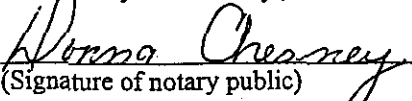
in the matter of PUBLIC NOTICE

was published in said newspaper 1 time (s) in the issue on February 20, 2003

Affiant further says that the said Naples Daily News is a newspaper published at Naples, in said Collier County, Florida, and that the said newspaper has heretofore been continuously published in said Collier County, Florida; distributed in Collier and Lee counties of Florida, each day and has been entered as second class mail matter at the post office in Naples, in said Collier County, Florida, for a period of 1 year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

  
(Signature of affiant)

Sworn to and subscribed before me  
this 20<sup>th</sup> day of February, 2003

  
(Signature of notary public)



Donna Chesney  
My Commission DD058336  
Expires September 11, 2005

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION  
NOTICE OF NEED DETERMINATION HEARING  
DOCKET NO. 030084-EI**

**PETITION OF FLORIDA POWER & LIGHT COMPANY TO DETERMINE  
THE NEED FOR A PROPOSED 230 KV ELECTRICAL TRANSMISSION LINE**

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Florida Public Service Commission  
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Re: Docket No. 030084-EI

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Tallahassee, Florida 32399-0850

The purpose of this prehearing conference will be to consider: (1) the simplification of the issues; (2) the identification of the positions of the parties on the issues; (3) the identification of witnesses and exhibits; (4) the establishment of an order of witnesses; (5) the possibility of obtaining stipulations concerning any matters at issue; and (6) the resolution of any remaining procedural matters that may aid in the disposition of the action.

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FLORIDA POWER & LIGHT COMPANY  
1813 Lee Street, Ft. Myers, FL 33901

FLORIDA POWER & LIGHT COMPANY  
4105 15TH Avenue S.W., Naples, FL 34116

FLORIDA PUBLIC SERVICE COMMISSION  
Easley Conference Center  
2540 Shumard Oak Boulevard, Tallahassee, FL 32399-0850

**JURISDICTION**

Jurisdiction over Florida Power & Light Company and this action is vested in the Commission pursuant to Chapter 366, Florida Statutes and Section 403.537, Florida Statutes.

By direction of the Florida Public Service Commission.

Blanca S. Bayo, Director  
Commission Clerk and Administrative Services

an FPL Group company



REC'D FEB 24 2003

# Henry-Glades SUNDAY NEWS

Published weekly in LaBelle, Florida

## AFFIDAVIT OF PUBLICATION

State of Florida • County of Hendry

Before the undersigned authority, personally appeared Raoul Batailler who on oath says he is the publisher of the Henry-Glades Sunday News weekly newspaper in LaBelle, in Hendry County, Florida, and that the attached copy of advertisement, being a

Notice of need determination hearing  
in the matter of \_\_\_\_\_

in the \_\_\_\_\_ Court, was published in said newspaper in the issues of

February 16, 2003

Affiant further says that the said Henry-Glades Sunday News is a newspaper published in LaBelle in said Hendry County, continuously published in said Hendry County, Florida each week, and has entered as periodical mail matter at the post office in LaBelle in said Hendry County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement, and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or reward for the purpose of securing this advertisement for publication in the said newspaper.

Signed to and subscribed before me is \_\_\_\_\_

Date 2/18/03 by Raoul Batailler

Printed name of person acknowledging \_\_\_\_\_

who is personally known to me or has produced \_\_\_\_\_

\_\_\_\_\_ as identification  
Type of Identification \_\_\_\_\_

\_\_\_\_\_ and who did (did not) take an oath.

Rosalinda H. Franklin  
Notary Public.

 Rosalinda H. Franklin  
Commission # DD168216  
Expires Dec. 1, 2006  
Aaron Notary  
1-800-350-5161

### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION NOTICE OF NEED DETERMINATION HEARING DOCKET NO. 030084-EI

#### PETITION OF FLORIDA POWER & LIGHT COMPANY TO DETERMINE THE NEED FOR A PROPOSED 230 KV ELECTRICAL TRANSMISSION LINE

Notice is hereby given that the Florida Public Service Commission will hold a public hearing in the above docket at the following time and place:

April 8-9, 2003, Beginning at 9:30 A.M.  
Florida Public Service Commission  
Easley Conference Center  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

#### PURPOSE AND PROCEDURE

The purpose of this hearing will be for a determination of need pursuant to Section 403.537, Florida Statutes (2002), for the construction of a 230 kV electrical transmission line. Segments of this 230 kV electrical transmission line may be located in Lee, Hendry and/or Collier Counties. The proposed electrical transmission line will start at FPL's Orange River Substation in Lee County and will terminate at FPL's Collier Substation in Collier County. The proceedings will be governed by the provisions of Chapter 120, Florida Statutes, Section 403.537, Florida Statutes, and Rules 25-22.075 and 25-22.076, Florida Administrative Code. Anyone wishing to become a party to the need determination proceeding should file an appropriate petition pursuant to Rule 25-22.039, Florida Administrative Code, with the Director, Commission Clerk and Administrative Services Division, at the following address:

Director, Commission Clerk and Administrative Services Division  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850  
Re: Docket No. 030084-EI

#### PREHEARING CONFERENCE

A prehearing conference will be conducted at the following time and place:

March 31, 2003 at 1:30 P.M.  
Florida Public Service Commission  
Easley Conference Center  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

The purpose of this prehearing conference will be to consider: (1) the simplification of the issues; (2) the identification of the positions of the parties on the issues; (3) the identification of witnesses and exhibits; (4) the establishment of an order of witnesses; (5) the possibility of obtaining stipulations concerning any matters at issue; and (6) the resolution of any remaining procedural matters that may aid in the disposition of the action.

#### APPLICATION

A copy of the Petition for Determination of Need and supporting exhibits will be available for public inspection during normal business hours at the following locations, beginning on or about February 26, 2003:

FLORIDA POWER & LIGHT COMPANY 1813 Lee Street, Ft. Myers, FL 33901  
FLORIDA POWER & LIGHT COMPANY 4105 15TH Avenue S.W., Naples, FL 34116

FLORIDA PUBLIC SERVICE COMMISSION  
Easley Conference Center  
2540 Shumard Oak Boulevard, Tallahassee, FL 32399-0850

#### JURISDICTION

Jurisdiction over Florida Power & Light Company and this action is vested in the Commission pursuant to Chapter 366, Florida Statutes and Section 403.537, Florida Statutes.

By direction of the Florida Public Service Commission.

Blanca S. Bayo, Director  
Commission Clerk and Administrative Services





# The Clewiston News

Published Weekly

Clewiston, Florida

## AFFIDAVIT OF PUBLICATION

State of Florida

County of Hendry

Before the undersigned authority, personally appeared Debra Miller, who on oath says she is the Editor of the Clewiston News, a weekly newspaper published at Clewiston in Hendry County, Florida, that the attached copy of advertisement being a Notice of Need Determination in the matter of Docket No. 030084-E1 ; Petition of Florida Power & Light Company to Determine the Need for a Proposed 230KV Electrical Transmission Line in the \_\_\_\_\_ court, was published in said newspaper in the issue(s) of February 20<sup>th</sup>, 2003

Affiant further says that the said Clewiston News is a newspaper published at Clewiston, in said Hendry County, continuously published in said Hendry County, Florida, each week, and has been entered as periodicals matter at the post office in Clewiston, in said Hendry County, Florida, for a period of one year next preceding the first publication says that she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sworn to and subscribed before me this 20<sup>th</sup> day of February, 2003

Tracy L. Rounds

Notary Public



Tracy L. Rounds  
Commission #DD161434  
Expires: Oct 28, 2006  
Bonded Thru  
Atlantic Bonding Co., Inc.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION  
NOTICE OF NEED DETERMINATION HEARING  
DOCKET NO. 030084-EI

PETITION OF FLORIDA POWER & LIGHT COMPANY TO DETERMINE  
THE NEED FOR A PROPOSED 230 KV ELECTRICAL TRANSMISSION LINE

Notice is hereby given that the Florida Public Service Commission will hold a public hearing in the above docket at the following time and place:

April 8-9, 2003, Beginning at 9:30 A.M.  
Florida Public Service Commission  
Easley Conference Center  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

**PURPOSE AND PROCEDURE**

The purpose of this hearing will be for a determination of need pursuant to Section 403.537, Florida Statutes (2002), for the construction of a 230 kV electrical transmission line. Segments of this 230 kV electrical transmission line may be located in Lee, Hendry and/or Collier Counties. The proposed electrical transmission line will start at FPL's Orange River Substation in Lee County and will terminate at FPL's Collier Substation in Collier County. The proceedings will be governed by the provisions of Chapter 120, Florida Statutes, Section 403.537, Florida Statutes, and Rules 25-22.075 and 25-22.076, Florida Administrative Code. Anyone wishing to become a party to the need determination proceeding should file an appropriate petition pursuant to Rule 25-22.039, Florida Administrative Code, with the Director, Commission Clerk and Administrative Services Division, at the following address:

Director, Commission Clerk and Administrative Services Division  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850  
Re: Docket No. 030084-EI

**PREHEARING CONFERENCE**

A prehearing conference will be conducted at the following time and place:

March 31, 2003 at 1:30 P.M.  
Florida Public Service Commission  
Easley Conference Center  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

The purpose of this prehearing conference will be to consider: (1) the simplification of the issues; (2) the identification of the positions of the parties on the issues; (3) the identification of witnesses and exhibits; (4) the establishment of an order of witnesses; (5) the possibility of obtaining stipulations concerning any matters at issue; and (6) the resolution of any remaining procedural matters that may aid in the disposition of the action.

**APPLICATION**

A copy of the Petition for Determination of Need and supporting exhibits will be available for public inspection during normal business hours at the following locations, beginning on or about February 26, 2003:

FLORIDA POWER & LIGHT COMPANY  
1813 Lee Street, Ft. Myers, FL 33901

FLORIDA POWER & LIGHT COMPANY  
4105 15TH Avenue S.W., Naples, FL 34116

FLORIDA PUBLIC SERVICE COMMISSION  
Easley Conference Center  
2540 Shumard Oak Boulevard, Tallahassee, FL 32399-0850

**JURISDICTION**

Jurisdiction over Florida Power & Light Company and this action is vested in the Commission pursuant to Chapter 366, Florida Statutes and Section 403.537, Florida Statutes.

By direction of the Florida Public Service Commission.

Blanca S. Bayo, Director  
Commission Clerk and Administrative Services

an FPL Group company



**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

Petition for Determination of Need for )  
Collier-Orange River 230kV Transmission )  
Line in Collier, Hendry, and Lee Counties, )  
by Florida Power & Light Company )  
\_\_\_\_\_ )

Docket No. 030084-EI  
Filed: February 26, 2003

**FLORIDA POWER & LIGHT COMPANY'S  
PETITION TO DETERMINE NEED FOR  
ELECTRICAL TRANSMISSION LINE**

Petitioner Florida Power & Light Company ("FPL"), by and through its undersigned counsel, hereby petitions the Florida Public Service Commission ("Commission") to determine, pursuant to Section 403.537, Florida Statutes (2002), and Rules 25-22.075 and 25-22.076, Florida Administrative Code, that there is a need for the proposed electrical transmission line described herein. In support of its Petition, FPL states:

1. The name and address of the affected agency are:

Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

2. FPL is an investor-owned electric utility that provides electric service to customers in its service area. FPL's full name and business address are:

Florida Power & Light Company  
9250 West Flagler Street  
Miami, Florida 33174

FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET NO. 030084-EI EXHIBIT NO. 2 DOCUMENT NUMBER-DATE  
COMPANY/ WITNESS. FPL w/ Exh. A. Attached 01962 FEB 26 03  
DATE: 04-08-03 FPSC-COMMISSION CLERK

3. All pleadings, motions, notices, staff recommendations, orders or other documents

filed or served in this proceeding should be served upon the following individuals on behalf of FPL:

Mr. William G. Walker, III  
Vice President, Regulatory Affairs  
Florida Power & Light Company  
215 S. Monroe Street  
Suite 800  
Tallahassee, FL 32301  
850/521-3910 (Telephone)  
850/521-3939 (Telecopier)

Kenneth A. Hoffman, Esq.  
Marsha E. Rule, Esq.  
Rutledge, Ecenia, Purnell & Hoffman, P.A.  
P. O. Box 551  
Tallahassee, Florida 32302  
850/681-6788 (Telephone)  
850/681-6515 (Telecopier)

- - and - -

R. Wade Litchfield, Esq.  
Florida Power & Light Company  
Senior Attorney  
700 Universe Boulevard  
Juno Beach, Florida 33408-0420  
(561) 691-7101 (Telephone)  
(561) 691-7135 (Telecopier)

4. FPL proposes to construct and operate a 230kV electrical transmission line as described in Exhibit A attached hereto. The proposed transmission line would originate at FPL's Orange River Substation in Lee County and would terminate at FPL's Collier Substation in Collier County, located on a right-of-way ("ROW") that is geographically diverse from the existing common transmission line ROW between these two substations (the "Collier-Orange River #3 Project"). The line has a planned in-service date of December, 2005.

5. The Collier-Orange River #3 Project is subject to the Transmission Line Siting Act ("TLSA"), Sections 403.52-403.5365, Florida Statutes (2002).

6. Pursuant to the TLSA and Section 403.537, Florida Statutes (2002), and Rules 25-22.075 and 25-22.076, Florida Administrative Code, the Commission has jurisdiction to determine

the need for the Collier-Orange River #3 Project, applying the standards set forth in Section 403.537(1)(b), Florida Statutes (2002).

7. The information required to be supplied for the need determination pursuant to Rule 25-22.076, Florida Administrative Code, appears in Exhibit A hereto and is incorporated herein by reference. Fifteen (15) copies of this Petition with Exhibit A are filed herewith.

8. FPL is charged with serving both its existing customers and new customers that locate in its service territory as well as any wholesale transmission customers. Currently, FPL forecasts continued strong customer and load growth in the territory affected by the proposed Collier-Orange River #3 Project for the foreseeable future.

9. The data and analyses contained in Exhibit A demonstrate the need for the Collier-Orange River #3 Project in the proposed time frame as the most cost-effective alternative available, taking into account the demand for electricity, the need for electric system reliability and integrity, the need for abundant, low-cost electrical energy to assure the economic well-being of the citizens of this state, the starting and ending points of the line, and other relevant matters pursuant to Section 403.537(1)(b), Florida Statutes (2002).

10. As demonstrated in more detail in Exhibit A and the prefiled direct testimony submitted contemporaneously with this Petition, the Collier-Orange River #3 Project is needed in December 2005 to: (a) avoid violations of numerous single contingency transmission criteria related to the potential outage of existing transmission facilities that are situated on a common ROW between the Orange River Substation and Collier Substation; and (b) provide another electrical feed via a separate ROW into the Collier/Naples area, thereby reducing the impact of a loss of the existing transmission facilities on the common ROW. The injection of an additional 230kV line on a

separate ROW between the Orange River Substation and Collier Substation by December 2005 is necessary to serve the increasing load and customer base in the area south of Ft. Myers and to provide a diverse path of power supply to this heavily populated area, thereby enhancing reliability and service restoration efforts.

11. In order to enable FPL and the Commission to comply with the notice requirements of Section 403.537(1)(a), Florida Statutes (2002) and Rule 25-22.075, Florida Administrative Code, FPL previously filed a Notice of Intent to File Petition for Transmission Line Need Determination on January 27, 2003. The Commission has set the final hearing in this docket for April 8-9, 2003. FPL has published notice of that hearing in the appropriate newspapers in accordance with the statutory requirements and the requirements of Rule 25-22.076(4), Florida Administrative Code.

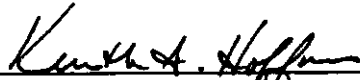
WHEREFORE, FPL respectfully requests that the Commission:

A. Hold a hearing on this Petition in accordance with Section 403.537, Florida Statutes, Chapter 120, Florida Statutes (2002), and applicable rules of the Commission;

B. Determine that there is a need for the Collier-Orange River #3 Project, with the starting point at FPL's existing Collier Substation in Collier County, and the ending point at FPL's existing Orange River Substation in Lee County, located on a right-of-way that is geographically diverse from the existing common transmission line right-of-way between these two substations, subject to the final corridor determination under the Transmission Line Siting Act; and

C. Enter a final order determining such need for the Collier-Orange River #3 Project.

Respectfully submitted,



KENNETH A. HOFFMAN, ESQ.  
Rutledge, Ecenia, Purnell & Hoffman, P.A.  
P. O. Box 551  
Tallahassee, Florida 32302  
Telephone: 850-681-6788  
Telecopier: 850-681-6515

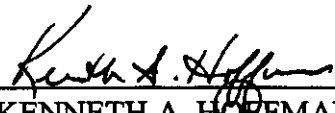
- - and - -

R. WADE LITCHFIELD, ESQ.  
Florida Power & Light Company  
Senior Attorney  
700 Universe Boulevard  
Juno Beach, Florida 33408-0420  
(561) 691-7101 (Telephone)  
(561) 691-7135 (Telecopier)

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a copy of the foregoing was furnished by Hand Delivery to the following this 26<sup>th</sup> day of February, 2003:

Larry Harris, Esq.  
Division of Legal Services  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Room 370  
Tallahassee, Florida 32399-0850

  
\_\_\_\_\_  
KENNETH A. HOFFMAN, ESQ.

FPLneedpetition



**EXHIBIT "A"**  
**(REDACTED)**

**FLORIDA POWER & LIGHT COMPANY'S  
PETITION TO DETERMINE NEED FOR:**

**THE COLLIER-ORANGE  
RIVER #3 PROJECT**

**DOCKET NO. 030084-EI**

**FEBRUARY 26, 2003**



**FPL**

DOCUMENT NUMBER - DATE

01962 FEB 26 03

FPSC-COMMISSION CLERK

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### VIII. Attachments

- 1a) *FPL Electric Facilities Map (State map)*
- 1b) *FPL Electric Facilities Map (FPL general map)*
- 2) *Historic and Forecasted FPL peak demand*
- 3) *West Region and the Project Service Area Loads*
- 4) *Map of study area with existing facilities and proposed project*
- 5a) *The Transmission Planning Criteria*
- 5b) *The Transmission Planning Process*
- 6) *Collier-Orange River Right-of-Way Representation and Results*
- 7) *Decision Making Analysis*
- 8) *Load Flow Project Summary Table*

### IX. Appendices

- Appendix A - *Load Flow Diagrams – With and Without project*
- Appendix B - *Load Flow Diagrams - Alternatives*

## **Executive Summary:**

The need for the Collier-Orange River #3 Project (sometimes referred to hereinafter as the “Project”) is based on several considerations:

- The need to serve the increasing load and customer base in the area south of Fort Myers, including the Naples load center, in a reliable manner consistent with North American Electric Reliability Council (“NERC”) Transmission System Standards.
- The need for another electrical feed via a separate Right-of-Way (“ROW”) path into the Naples load center, thereby reducing the impact of a loss of the existing transmission facilities on a common ROW.
- The ability to efficiently maintain transmission facilities and mitigate the risks of an impact on reliability.
- The opportunity, subject to final ROW siting under the Transmission Line Siting Act (“TLSA”), to *efficiently and effectively integrate and serve* new distribution substations that will be needed to serve projected load growth south of Fort Myers in Lee and Collier Counties.
- The ability to provide efficient future long range transmission expansion by acquiring additional ROW while practicable routes remain available.

The area south of Fort Myers is bounded on the north by the Fort Myers Plant and the Orange River Substation, on the west by the Gulf of Mexico and on the east by the county lines of Collier and Lee as shown in Attachment 1a and further outlined in Attachment 1b (the “Project Service Area”), which includes Lee County Electric Coop’s (LCEC) load in this area. The Project Service Area has become a major load center, with

FPL serving approximately 357,700 customers (an approximate population of 594,900) as of January 2003. The load in this area is projected to continue to grow at an average rate of approximately 11,300 customers<sup>1</sup> or 68 MW per year. The load served by the existing transmission facilities has grown to a point where additional transmission capacity is needed to maintain reliable electric service. Without the Project, a single contingency affecting any one of six 230kV transmission line sections within the common ROW could cause a loss of service to approximately 104,200 customers or approximately 173,200 people in the Project Service Area. In addition, without the Project, overloads ranging from 102% to as high as 124% of the thermal MVA facility rating, under eleven separate single contingencies, would require the interruption of service of 7,200 to 41,100 customers (approximately 12,000 to 68,300 people) depending on the specific outage. Without the Project, FPL would not be in compliance with NERC Transmission System Standards and the level of reliability in the Project Service Area would be considerably reduced.

[REDACTED]

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<sup>1</sup> Population growth is expected to be 18,800 per year.

█ Additionally, the placement of the new transmission line within a new and separate ROW would significantly enhance the restoration of service to customers. █

█  
█  
█ Therefore, the additional transmission capacity needed should be constructed over a separate ROW in order to maintain reliable electric service to an area that can be currently described as an electrical peninsula.

The Project best fulfills the needs and considerations listed above. Additional benefits achieved by placing the new transmission line in a separate ROW include:

- The opportunity to integrate new substations east of the existing ROW;
- Increased operational flexibility and reliability in scheduling and performing maintenance on the transmission facilities serving this area; and
- The ability to meet the future transmission needs in this rapidly developing area by obtaining additional ROW while practicable routes remain available.

Current projections indicate that substantial new load growth in the Project Service Area will occur in Collier and Lee Counties to the east of the common ROW. These areas are already earmarked for development. A new route sited to the east of the existing ROW would provide an opportunity to more effectively integrate the new substations required to serve this growing area.

Transmission facilities need to be taken out of service for maintenance without materially affecting reliability. Maintenance of one transmission line may require that other transmission lines in a common ROW also be taken out of service to facilitate maintenance. The establishment of a separate ROW will reduce the reliability risk associated with having multiple transmission facilities unavailable during maintenance. This will lower the possibility of customer outages during maintenance.

As previously discussed, this is a rapidly growing area and FPL expects to need an additional transmission circuit sometime within the next 10 to 15 years. Establishing a new ROW now could accommodate this additional line when the need materializes. Although FPL is not seeking a determination of need for a second future transmission circuit, the future need highlights an additional benefit of securing a geographically separate ROW while practicable, alternative routes remain available. Locating the additional future transmission line in the separate ROW would better distribute transmission capacity and thus further strengthen the reliability of FPL's service. This is in the long-term interest of FPL's customers.

In summary, the Project satisfies the need for a reliable supply of power for FPL's existing and new customers in the Project Service Area.

**I. Description of FPL Electrical Facilities**

Maps of FPL's transmission network indicating the location of generating plants, substations, and transmission lines are shown in Attachments 1a and 1b. There is no major generating source of power in southwest Florida to the south of the Orange River Substation. [REDACTED]

[REDACTED]

[REDACTED] The specific part of the electrical system in the Project Service Area can best be described as an electrical peninsula, as shown in Attachment 1b. This situation is of particular concern given the rate of load growth in the Project Service Area. A list of historic and forecasted FPL peak demand and energy is provided in the Florida Power & Light Company Ten Year Power Plant Site Plan 2002-2011, Schedules 7.1 and 7.2, submitted on April 1, 2002 to the Florida Public Service Commission (the "Commission"), incorporated herein as Attachment 2. Attachment 3 shows the summer and winter historic peak loads and projected peak loads for the Project Service Area. As reflected in Attachment 3, FPL's 2003 winter peak load forecast for FPL's West Region is 4,759MW. In fact, on January 24, 2003, FPL's peak load in the West Region was 4,781MW.<sup>2</sup> The corresponding actual winter peak load for

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<sup>2</sup> On that same date, LCEC had an additional load of 834MW in the West Region served from FPL's Transmission System.



the Project Service Area, including both FPL and LCEC load, was 2,156MW.<sup>3</sup> This winter peak load has grown at an average rate of 5% per year for the last 11 years.

To address these increasing demands for electricity, FPL has increased the transmission capability in the Project Service Area over the last several years by adding 360MVars of capacitors, approximately 50 miles of 230kV and 138kV transmission lines, and approximately 537MVA of capacity upgrades on existing 230kV and 138kV transmission lines. Future growth now requires an additional electrical feed into the Project Service Area. The Project best meets the needs of the Project Service Area, as described more fully below.

## **II. The Collier-Orange River #3 Project**

The Project consists of a new transmission line extending from FPL's Collier to Orange River Substations. The new line will be constructed with a single pole design on a new ROW, and will have a design and operating voltage of 230kV. Attachment 4 is a map showing the existing electrical facilities in the Project Service Area (black), a conceptual connection for the Project (blue), and other planned facilities indicated (red). The locations on the map of facilities not yet in service are approximate. In particular, the line depicting the Project is intended to indicate conceptually the electrical connection from an engineering and electrical planning perspective, without regard to specific environmental and other considerations that will affect the actual siting of the Project.

---

<sup>3</sup> LCEC's contribution to the total was 229MW.

The actual route for the Project will be based on the results of the Project's certification process under the TLSA. Similarly, the future substation sites shown on Attachment 4 are approximate. The proposed in-service date for the Project is December 2005.

Project cost estimates are presented as a range to reflect cost variances that could result from different potential routes and conditions of certification that will be determined in the TLSA process. These estimated costs include land acquisition, environmental permitting and mitigation, ROW preparation, line construction of single pole concrete structures, and a minimum transmission line capacity of 759MVA. The total Project cost is estimated between \$23M and \$41M in 2003 dollars, subject to final ROW routing and conditions of certification. The corresponding range of present value revenue requirements ("PVR") is \$32M to \$57M in 2003 dollars. A summary of the Project's major components and their estimated costs follows.

Collier Substation: Add line terminal	\$0.4M
Orange River Substation: Expand site, add line terminal	\$1.1M
Estimated Transmission Line Costs	\$27.8M to \$39.7M
(Potential Cost Savings)	<u>(\$0.0 to \$6.2M)<sup>4</sup></u>
Estimated Total Project Cost	\$23.1M to \$41.2M

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<sup>4</sup> A portion of the estimated "Transmission Line Costs" may be offset by the use of an existing line segment (Transmission service from the Collier substation to the Orangetree substation, Project in-service date of 11/2003) depending on final route selection for the Project. The potential cost savings range from \$0 (no use of line segment) to \$6.2M (full

### **III. Transmission Planning Criteria and Process**

Planning for the FPL transmission system employs practices and criteria that are consistent with the NERC Planning Standards contained within the NERC Transmission Systems Standards under System Adequacy and Security, included as Attachment 5a. The NERC Transmission System Standards specify transmission system operating scenarios that should be evaluated, and the levels of system performance that should be attained. FPL's transmission planning process is designed to ensure compliance with the NERC Transmission System Standards, and involves three major steps: (1) the preparation of system models, (2) the assessment of the transmission system, and (3) the development and evaluation of alternatives. A more detailed discussion of these steps is provided in Attachment 5b.

### **IV. Discussion of Needs and Benefits**

The need for the Project is based on the following considerations:

- The need to serve the increasing load and customer base in the Project Service Area in a reliable manner consistent with NERC Transmission System Standards.
- The need for another electrical feed via a separate ROW path into the Naples load center, thereby reducing the impact of a loss of the existing transmission facilities on a common ROW.
- The ability to efficiently maintain transmission facilities and minimize the adverse effect on reliability.

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use of line segment).

- The opportunity, subject to final ROW routing siting under the TLISA, to efficiently and effectively integrate and serve new distribution substations that will be needed to serve projected load growth in the Project Service Area.
- The ability to provide efficient future long range transmission expansion by acquiring additional ROW before Lee and Collier Counties are further developed and while practicable routes remain available.

The Project Service Area has become a major load center. As of January 2003, FPL was serving approximately 357,700 customers representing a population of approximately 594,900 people. Load in this area is projected to continue to grow at an average annual rate of approximately 11,300 new customers representing a population increase of approximately 18,800 people per year.<sup>5</sup> Presently, the forecasted load for the Project Service Area winter peak of 2005/2006 is 2,352MW. The forecasted 2006 summer peak load for the Project Service Area is 1,980MW (includes FPL and LCEC load). The load served by the existing transmission facilities in the Project Service Area has grown to a point where additional transmission facilities are needed to maintain reliable electric service. The injection of a new 230kV line in a separate ROW fulfills this need in the most effective manner, taking into account the considerations listed above. A discussion of the need and the relevant considerations follows.

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<sup>5</sup>An increase of 11,300 customers per year imposes an annual incremental 68MW of load on the FPL electrical system in the Project Service Area.

**A. The Need to Serve Load Growth in a Reliable Manner Consistent With NERC  
Transmission System Standards**

The Project is needed to comply with NERC Transmission System Standards for single contingency events (See Attachment 5a, page 1, Category B) during both winter and summer peak conditions. The increase in load will cause the capacity of the existing transmission system out of the Orange River Substation into the Collier Substation to be exceeded under single contingency conditions which, if not mitigated, would not be in compliance with NERC Transmission System Standards. As shown below, implementation of the Project will mitigate the overloads and low voltages that otherwise could occur in the Project Service Area as a result of a single contingency event.

**1. Transmission Planning Analysis - Results Without The Collier-Orange River #3  
Project**

Page A.1 of Appendix A provides a “load flow diagram key” to assist in interpreting the load flow maps contained in Appendices A and B. Page A.2 shows a load flow output diagram of the year 2005/2006 winter peak load condition without any new transmission facilities. The diagram represents what is called the base case scenario or normal condition (i.e., no contingencies) for the year 2005/2006 winter peak load. The diagram shows that all facilities are operating within normal equipment ratings (i.e., no overloads or low voltages).

Without any new transmission facilities in service by December 2005, the following contingencies will cause unacceptable low voltages in the Project Service Area (See

Attachment 8) that could cause a loss of service for up to approximately 104,200 customers (approximately 173,200 people) as shown in Table I, below:

Jetport-Orange River 230kV line section

Jetport-San Carlos 230kV line section

Orange River-Vanderbilt 230kV line section

Corkscrew-Orange River 230kV line section

Livingston-Orangetree 230kV line section

Corkscrew-Orangetree 230kV line section

In addition, Pages A.3 through A.13 show overloads ranging from 102% to a high of 124% (See Attachment 8) of the thermal MVA facility rating caused by any of the following contingencies:

Alico autotransformer 230/138kV	(Page A.3)
Alico-Metro 138kV line section	(Page A.4)
Colonial-Edison 138kV line section	(Page A.5)
Colonial-Ft. Myers 138kV line section	(Page A.6)
Ft. Myers-Ft. Myers TP 138kV line section	(Page A.7)
Buckingham-Ft. Myers 138kV line section	(Page A.8)
Ft. Myers TP-Winkler 138kV line section	(Page A.9)
Metro-Winkler 138kV line section	(Page A.10)
Collier-Livingston 230kV line section	(Page A.11)
Buckingham-Gladiolus 138kV line section	(Page A.12)
Alico-San Carlos 230kV line section	(Page A.13)

In order to mitigate the overloads shown in Pages A.3 through A.13, it would be necessary to interrupt the service of approximately 7,200 to 41,100 customers (approximately 12,000 to 68,300 people) depending on the specific outage. Table I below shows a summary of the total number of customers whose service could be interrupted for each of the contingencies listed above if no new transmission facilities are placed in service by December 2005.

**TABLE I**

<b>Outage of Transmission Facility</b>	<b>Estimated Customers Affected in 2005</b>
Jetport-Orange River 230kV line section	104,200
Jetport-San Carlos 230kV line section	104,200
Orange River-Vanderbilt 230kV line section	104,200
Corkscrew-Orange River 230kV line section	104,200
Livingston-Orangetree 230kV line section	104,200
Corkscrew-Orangetree 230kV line section	104,200
Alico autotransformer 230/138kV	7,200
Alico-Metro 138kV line section	12,600
Colonial-Edison 138kV line section	13,400
Colonial-Ft. Myers 138kV line section	22,300
Ft. Myers-Ft. Myers TP 138kV line section	33,000
Buckingham-Ft. Myers 138kV line section	37,500
Ft. Myers TP-Winkler 138kV line section	33,000
Metro-Winkler 138kV line section	24,800
Collier-Livingstion 230kV line section	20,600
Buckingham-Gladiolus 138kV line section	7,200
Alico-San Carlos 230kV line section	41,100



Page A.14 shows a load flow output diagram of the year 2006 summer peak load condition without any new transmission facilities in service. This diagram represents what is called the base case scenario or normal condition (i.e., no contingencies) for the year 2006 summer peak load condition with all facilities operating within normal equipment ratings (i.e., no overloads or low voltages).

As shown on Page A.15, if no new transmission facilities are placed in service by the summer of 2006, the loss of the Jetport-Orange River 230kV line section (single contingency event) will cause overloads ranging from 102% to 103% of the thermal MVA facility rating which is greater than the applicable rating of 100% for some of the transmission facilities as well as low voltages in the Project Service Area. In order to mitigate the overloads shown in Page A.15, it would be necessary to interrupt the service of 2,200 customers.

## **2. Transmission Planning Analysis - Results With The Collier-Orange River #3 Project**

The Project provides voltage support and relieves all single contingency thermal overloads shown in Pages A.3 through A.13 and A.15, as well as the six 230kV contingencies previously discussed, that would cause severe low voltage problems in the Project Service Area.

Page A.16 shows a load flow output diagram of the 2005 winter peak condition with the Project in service. Page A.17 shows a load flow output diagram of the 2006 summer peak condition with the Project in service. The construction of the Project provides a

separate 230kV path relative to the existing 138kV and 230kV transmission network in the Project Service Area. The Project unloads the existing parallel transmission network by providing another ROW path for power to flow from the Orange River Substation to the Naples load center.

Pages A.18 through A.35 show that with the Project in service, any one of the six 230kV contingencies that would cause severe low voltage or the loss of any of the facilities evaluated in Pages A.3 through A.13 and A.15 do not result in the overload or low voltage conditions of any transmission facilities.

### **3. Common ROW Exposure/Diversity of Transmission Facilities**

When evaluating the performance of the transmission system, FPL evaluates common mode outages such as the loss of the transmission facilities on a common ROW and the effect of such outage on major load centers. This type of evaluation is consistent with NERC Transmission System Standards for Category D events (See Attachment 5a, page 4). Accordingly, it is necessary to take into consideration the exposure to the potential outage of the transmission facilities located on the common ROW serving this area.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] As depicted in Attachment 4, the existing transmission facilities on the common ROW serve as the main feed of power for the Naples load center.

The loss of a common ROW is infrequent; however, it does occur in Florida from time to time. For example, in August 1998, a plane crash took out of service both 500kV circuits located on a common ROW north of FPL's Duval Substation located in Duval County. In November 1998, another plane crash took out both 115kV circuits on a common ROW out of FPL's Volusia Substation located in Volusia County. In February 2001, a fire occurred in Indian River County south of FPL's Poinsett Substation located in southeast Orange County took out both 500kV circuits that reside on a common ROW. Recently, on February 9, 2003, a Cessna single engine airplane clipped a transmission line in a common ROW containing five 230kV transmission lines east of FPL's Andytown Substation located in Broward County. Even though this event only damaged one of the transmission lines in this ROW, and the consequences were not severe, it is illustrative of the type of events that do occur from time to time and which can cause severe consequences.

In addition to airplane crashes and fires, events that can cause loss of common ROW include tornadoes, hurricanes or other natural disasters, and, in the post-September 11<sup>th</sup> world, sabotage and terrorism. While such threats exist for the entire FPL transmission system, the risks for the Project Service Area are particularly acute because of the potentially serious consequences in the event of such a loss. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Moreover, because the Project would continue to be in service because the Project is on a separate ROW, service unavailability could be rotated among some of the customers in the Project Service Area.

Thus, constructing the Project on a new ROW greatly reduces the number of customers that would lose power for an extended period of time in the event of a sustained outage of the transmission facilities on the common ROW south of Orange River and substantially enhances the restoration of service to customers.

## **B. Other Benefits**

### **1. Maintenance Flexibility**

From time to time, transmission facilities need to be taken out of service for maintenance without materially affecting reliability. Placement of the Project on a new ROW would lessen the likelihood of multiple transmission facilities being unavailable during maintenance periods, and thus mitigating the risks of an impact on reliability.

### **2. Facilitate Future Transmission Expansion**

Current projections indicate that the majority of the new load growth is expected to occur to the east of the existing transmission facilities in the common ROW through Collier and Lee Counties. In order to serve this new load, it will be necessary to site new distribution substations to the east of the existing transmission lines, in areas already earmarked for development. In fact, several of these substations have been planned and others are under

consideration (See Attachment 4). The siting of these new substations in the future is expected to require that transmission facilities be rerouted and/or constructed to the east of the existing common ROW in order to serve these substations from the transmission system.

### **3. Future Load Growth**

The composite load for the Project Service Area has grown at an average growth rate of 5% per year for the last 11 years. Evidence of the rapid growth in this area can be seen in the new residential and commercial development east of Interstate 75, and the existing development west of Interstate 75 becoming more dense. It is expected that this area will continue to grow at an average rate of 3% per year for the next nine years (See Attachment 3). It is expected that this load will continue to grow beyond the year 2012 with a significant majority of this growth occurring east of Interstate 75.

FPL is interested in planning for the future and expects to need an additional transmission circuit to serve the Project Service Area sometime within the next 10 to 15 years. Establishing a new ROW now could accommodate this additional line when the need materializes. Although FPL is not seeking a determination of need for a second future transmission circuit, the future need highlights an additional benefit of securing a geographically separate ROW while practicable, alternative routes remain available. Locating the additional future transmission line in the separate ROW would better distribute transmission capacity and thus further strengthen the reliability of FPL's service. This is in the long-term interest of FPL's customers.

### **C. Summary of Collier-Orange River #3 Project Benefits**

As discussed above, the construction of the Project provides the following benefits to the Project Service Area:

- Mitigates thermal overloads and low voltage conditions in accordance with NERC Transmission System Standards to provide reliable service to existing and new customers as the area's load continues to grow;
- Increases the reliability of the Project Service Area by providing an alternate transmission path for power to flow from the Orange River Substation via a separate ROW to the Naples load center;
- Provides for the ability to efficiently maintain transmission facilities and minimize the adverse effect on reliability;
- Provides the opportunity, subject to final ROW siting under the TLISA to efficiently and effectively integrate and serve new distribution substations that will be needed to serve projected load growth in the Project Service Area; and
- Provides for future long range transmission expansion by acquiring additional ROW while practicable routes remain available.

In summary, the Project ensures that FPL customers in the Project Service Area will continue to be served reliably and effectively.

### **V. Discussion of Alternatives**

In order to continue to serve the load in the Project Service Area beyond December 2005 in a reliable and effective manner consistent with NERC planning standards, several

alternatives were investigated.<sup>6</sup> The factors used to evaluate the performance of the alternatives included reliability, cost, ROW diversity, feasibility, operational flexibility, and compatibility with long range plans. Those alternatives are discussed and assessed below. Further, Attachment 7 includes a matrix comparing each of the alternatives.

### **Alternative I – Placement of Collier-Orange River 230kV #3 on Existing Common ROW**

Alternative I provides a 230kV parallel path to the existing 138kV and 230kV network south of the Fort Myers and Orange River Substation, using the remaining capability on the existing common ROW that contains most of the existing transmission lines into the Project Service Area. The estimated capital cost of this alternative is projected to be \$17M in 2003 dollars. The corresponding PVRR is \$25M in 2003 dollars. Alternative I unloads the existing parallel network and provides another electrical circuit to the Naples load center. This alternative provides adequate voltage support and relieves single contingency thermal overloads.

Page B.1 of Appendix B shows a load flow output diagram of the 2005 winter peak condition with Alternative I in service under normal conditions. Page B.2 shows a load flow output diagram of the 2006 summer peak condition with Alternative I in service under normal conditions. Under normal conditions, with Alternative I in service, all

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<sup>6</sup> Consistent with Rule 25-22.076, several transmission alternatives were considered. In addition, FPL considered as another option the feasibility of cost-effectively avoiding additional transmission facilities by siting generation in the Project Service Area. As discussed in Alternative V, such an option was determined to be economically infeasible.



facilities are within applicable thermal ratings and acceptable voltages. Further, pages B.3 through B.20 show that with Alternative I in service, any one of the six 230kV contingencies identified in Section IV.A.1 and evaluated in Pages A.3 through A.13 and A.15 would not result in the overload or low voltage of any other transmission facilities.

However, Alternative I has several major drawbacks. First, it does not address the reliability risks associated with the common ROW issue discussed in Section IV.A.3.

[REDACTED]

Second, this alternative does not facilitate the expected future expansion of the transmission system to integrate and serve new distribution substations as the load increases in the Project Service Area. Finally, Alternative I does not provide the additional benefits discussed in Section IV.B above. For these reasons, Alternative I was rejected.

**Alternative II - Orange River-Collier Area 500kV Transmission Line**

Alternative II introduces a 500kV transmission injection into the Project Service Area, thus providing needed voltage support and relieving numerous single contingency thermal overloads. This project would require a new transmission ROW extending from

a point along the existing Andytown-Orange River 500kV transmission line to a new substation in the Collier area (approximately 25 to 30 miles). The new substation in the Collier area would require the installation of 500kV to 230kV transformation equipment, along with the looping of two of the existing Collier-Orange River 230kV transmission lines into the new substation.

The estimated capital cost of Alternative II is projected to be \$99M in 2003 dollars. The corresponding PVRR is \$138M in 2003 dollars.

The major drawbacks for this alternative are the high cost, the failure to facilitate expansion of the transmission system to integrate and serve future distribution substations, and questionable ability to meet the recommended in-service date of December 2005 due to increased permitting and construction schedules associated with a 500kV line. Therefore, this alternative was rejected.

### **Alternative III – Alico-Orange River 230kV Transmission Line**

Alternative III introduces an additional 230kV transmission line from FPL's Orange River Substation into FPL's Alico Substation. This alternative does not fully comply with NERC Transmission System Standards. This alternative provides minimal voltage support for the Project Service Area and does not relieve single contingency outages in accordance with the NERC Transmission System Standards. Overloads and low voltages remain for two contingencies, as shown on Pages B.21 and B.22. Because this alternative

will not relieve all of the thermal overloads and low voltages due to a single contingency, customer interruptions may still be necessary until the out-of-service transmission facilities can be repaired. Also, the voltage support in the Project Service Area would not be adequate for the more severe 230kV contingencies. For these reasons, this alternative was rejected.

#### **Alternative IV – Ft. Myers-Collier 138kV Transmission Line**

Alternative IV introduces an additional 138kV transmission line from FPL's Fort Myers Plant into FPL's Collier Substation. This alternative does not comply with NERC Transmission System Standards. This alternative provides minimal voltage support and relieves only some minor single contingency thermal overloads. Alternative IV would not eliminate the more severe 230kV transmission overloads resulting from a single contingency and its effectiveness would be limited to only a few contingencies. Overloads and low voltages would remain for two contingencies, as shown on Pages B.23 and B.24. Because this alternative will not relieve all of the thermal overloads and low voltages resulting from a single contingency, customer interruptions may be necessary until the out-of-service transmission facilities can be repaired. Also, the voltage support in the Project Service Area would not be adequate for the more severe 230kV contingencies. Therefore, this alternative was rejected.

#### **Alternative V - Siting Generation Near the Naples Load Center**

One alternative to mitigate single contingency overloads and low voltages in the Project Service Area is to site new generation near the Naples load center. Siting of new

generation near the Naples load center (e.g., FPL's Collier Substation) would reduce the power flow into the area to maintain adequate voltage levels. However, siting new generation (2 combustion turbines) near the Naples load center was found to be uneconomic (\$101M NPV) relative to the Project. Therefore, this alternative was rejected.

**VI. Adverse Consequences Of Not Constructing the Collier-Orange  
River 230 kV Project**

The purpose of and need for the Project is to comply with NERC Transmission System Standards and to reduce the potential for extended service unavailability in the Project Service Area. The Project will assure that a reliable and diverse supply of power is maintained for existing and future customers in the Project Service Area. If the Project is not built or if it is delayed, a less reliable alternative would have to be employed, thereby jeopardizing reliable service to existing and future customers in the Project Service Area.

## **VII. Conclusion**

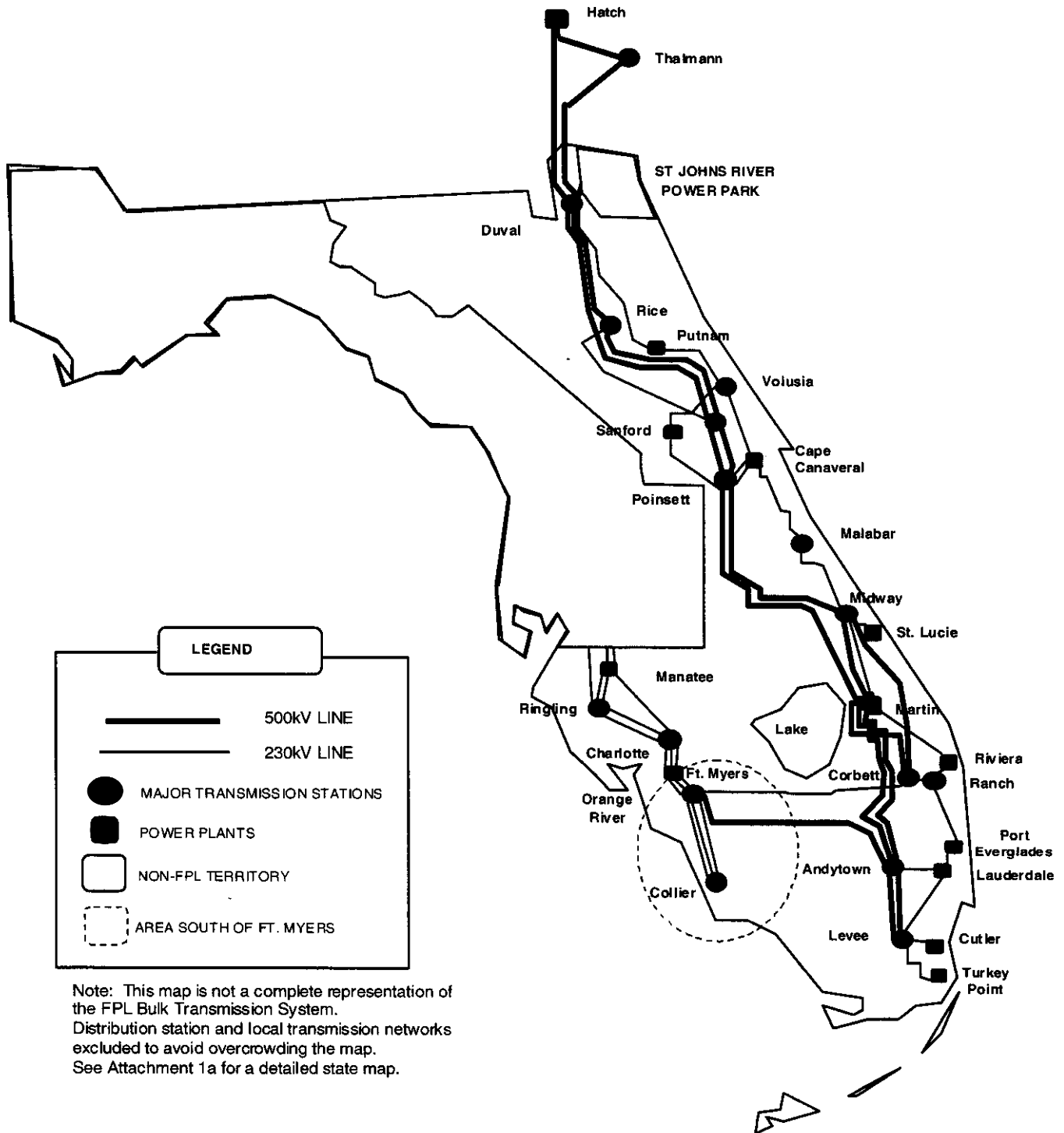
The Project is needed by December 2005 to maintain the reliability of power supply into the Project Service Area. The other alternatives to address this situation are either too costly, do not provide for the operation of the facilities within the rated thermal and voltage limits in the event of a single contingency consistent with NERC Transmission System Standards, do not provide the advantages and benefits of a separate electrical path into the area, or otherwise are not viable. The Commission, therefore, should grant FPL's Petition for a Determination of Need for the Collier-Orange River #3 Project.

**VIII. ATTACHMENTS**

**ATTACHMENT 1a**

# ATTACHMENT 1b

## FPL Substation and Transmission System Configuration





# ATTACHMENT 2

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## Schedule 7.1 Forecast of Capacity, Demand, and Scheduled Maintenance At Time Of Summer Peak

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Year	Total Installed 1/ Capacity	Firm Capacity Import	Firm Capacity Export	Firm QF	Total Capacity Available 2/	Total Peak 3/ Demand	DSM 4/ MW	Firm Summer Peak Demand	Reserve Margin Before Maintenance 5/ MW % of Peak	Scheduled Maintenance MW	Reserve Margin After Maintenance 6/ MW % of Peak		
	MW	MW	MW	MW	MW	MW	MW	MW	MW % of Peak	MW	MW % of Peak		
2002	17,860	2,403	0	877	21,140	19,131	1,414	17,717	3,423	19.3	0	3,423	19.3
2003	19,135	2,474	0	877	22,486	19,765	1,491	18,274	4,212	23.0	0	4,212	23.0
2004	19,135	2,474	0	877	22,486	20,226	1,570	18,656	3,830	20.5	0	3,830	20.5
2005	21,031	1,758	0	867	23,656	20,719	1,651	19,068	4,588	24.1	0	4,588	24.1
2006	21,031	1,757	0	734	23,522	21,186	1,729	19,457	4,065	20.9	0	4,065	20.9
2007	22,138	1,310	0	734	24,182	21,556	1,807	19,749	4,433	22.4	0	4,433	22.4
2008	22,138	1,310	0	734	24,182	21,870	1,886	19,984	4,198	21.0	0	4,198	21.0
2009	23,245	1,310	0	683	25,238	22,271	1,962	20,309	4,929	24.3	0	4,929	24.3
2010	24,352	382	0	639	25,373	22,687	1,987	20,700	4,673	22.6	0	4,673	22.6
2011	25,459	382	0	594	26,435	23,106	1,987	21,119	5,316	25.2	0	5,316	25.2

1/ Capacity additions and changes projected to be in-service by June 1st are considered to be available to meet Summer peak loads which are forecasted to occur during August of the year indicated. All values are Summer net MW.

2/ Total Capacity Available=Col.(2) + Col.(3) - Col.(4) + Col.(5).

3/ These forecasted values reflect the Most Likely forecast without DSM.

4/ The MW shown represent cumulative load management capability plus incremental conservation from 1/99 - on. They are not included in total additional resources but reduce the peak load upon which Reserve Margin calculations are based.

5/ Margin (%) Before Maintenance = Col.(10) / Col.(9)

6/ Margin (%) After Maintenance =Col.(13) / Col.(9)

# ATTACHMENT 2

Page 2 of 2

## Schedule 7.2 Forecast of Capacity, Demand, and Scheduled Maintenance At Time of Winter Peak

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Year	Total Installed 1/ Capability MW	Firm Capacity Import MW	Firm Capacity Export MW	Firm QF MW	Total Capacity Available 2/ MW	Total Peak 3/ Demand MW	DSM 4/ MW	Firm Winter Peak Demand MW	Reserve Margin Before Maintenance 5/ MW % of Peak	Scheduled Maintenance MW	Reserve Margin After Maintenance 6/ MW % of Peak		
2001/02	17,730	1,910	0	886	20,526	18,968	1,589	17,379	3,147	18.1	0	3,147	18.1
2002/03	20,007	2,634	0	877	23,518	19,551	1,643	17,908	5,610	31.3	0	5,610	31.3
2003/04	20,369	2,673	0	877	23,919	19,976	1,691	18,285	5,634	30.8	0	5,634	30.8
2004/05	20,369	2,623	0	867	23,859	20,418	1,738	18,680	5,179	27.7	0	5,179	27.7
2005/06	22,402	1,860	0	734	24,996	20,854	1,786	19,068	5,928	31.1	0	5,928	31.1
2006/07	22,402	1,860	0	734	24,996	21,204	1,831	19,373	5,623	29.0	0	5,623	29.0
2007/08	23,598	1,317	0	734	25,649	21,538	1,875	19,663	5,986	30.4	0	5,986	30.4
2008/09	23,598	1,317	0	734	25,649	21,966	1,918	20,048	5,601	27.9	0	5,601	27.9
2009/10	24,795	1,317	0	683	26,795	22,366	1,955	20,411	6,384	31.3	0	6,384	31.3
2010/11	25,992	389	0	595	26,976	22,785	1,955	20,830	6,146	29.5	0	6,146	29.5

1/ Capacity additions and changes projected to be in-service by January 1st are considered to be available to meet Winter peak loads which are forecast to occur during January of the "second" year indicated. All values are Winter net MW.

2/ Total Capacity Available = Col.(2) + Col.(3) - Col.(4) + Col.(5).

3/ These forecasted values reflect the Most Likely forecast without DSM.

4/ The MW shown represent cumulative load management capability plus incremental conservation. They are not included in total additional resources but reduce the peak load upon which Reserve Margin calculations are based.

5/ Margin (%) Before Maintenance = Col.(10) / Col.(9)

6/ Margin (%) After Maintenance = Col.(13) / Col.(9)

## ATTACHMENT 3

### FPL West Region and South of Ft. Myers Loads

Historical and Forecasted Peak Loads (MW)

Year	West Region FPL		Area south of Ft. Myers (FPL + LCEC)	
	Winter	Summer	Winter	Summer
1991	2592	2310	1169	1081
1992	2953	2445	1332	1144
1993	2973	2566	1341	1201
1994	2943	2658	1327	1244
1995	3893	2976	1756	1393
1996	4752	2807	2143	1314
1997	3924	3168	1770	1483
1998	3133	3373	1413	1578
1999	3964	3388	1788	1586
2000	3892	3443	1755	1611
2001	3773	3499	1702	1637
2002	4020	3485	1813	1631
2003	4759	3803	2146	1780
2004	4906	3947	2213	1847
2005	5060	4084	2282	1911
2006	5216	4229	2352	1979
2007	5368	4372	2421	2046
2008	5522	4511	2490	2111
2009	5667	4647	2556	2175
2010	5813	4790	2622	2242
2011	5959	4932	2688	2308
2012	6108	5075	2755	2375

	Area south of Ft. Myers	
	Winter	Summer
Historical Growth (11 years)	5.01%	4.62%
Forecasted Growth (Through 2012)	3.15%	3.72%

**ATTACHMENT 4**  
COLLIER-ORANGE RIVER #3 PROJECT

## **ATTACHMENT 5a**

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### **The Transmission Planning Criteria**

The NERC Transmission System Standards are divided into categories A, B, C and D. FPL utilizes these Standards for its planning criteria. Category A addresses normal system conditions with all facilities in service. Category B addresses system conditions following the loss of a single facility. Category C addresses system conditions following the loss of two or more facilities. Finally, Category D addresses system conditions following an extreme event where multiple facilities are removed from service.

The need for transmission system upgrades is most frequently based on potential overload conditions associated with the Category B contingencies (single contingency) listed in Table 1 of this Attachment 5a. Generally, Category C and D multiple contingency analysis is used to identify potential situations of cascading interruptions and/or instability.

The planned transmission system with its expected loads and transfers must be stable and within applicable ratings for all Category A, B, and C contingency scenarios.

The effect of Category D contingencies on system stability are also evaluated. The design of new transmission connections should take into account and minimize, to the extent practical, the adverse consequences of Category D contingencies. Lower probability Category D contingencies, when they occur in combination with forecasted demand levels and firm interchange transactions, must not result in uncontrolled, cascading interruptions. While

**ATTACHMENT 5a**

Page 2 of 4

controlled interruption of load and/or opening of transmission circuits may be needed, the system should be within its emergency limits and capable of rapid restoration after operation of automatic controls.

**Attachment 5a**

**Table I. NERC Transmission Systems Standards — Normal and Contingency Conditions**

Category	Contingencies	Elements Out of Service	System Limits or Impacts				
	Initiating Event(s) and Contingency Element(s)		Thermal Limits	Voltage Limits	System Stable	Loss of Demand or Curtailed Firm Transfers	Cascading <sup>c</sup> Outages
A - No Contingencies	All Facilities in Service	None	Applicable Rating <sup>a</sup> (A/R)	Applicable Rating <sup>a</sup> (A/R)	Yes	No	No
B - Event resulting in the loss of a single element.	Single Line Ground (SLG) or 3-Phase (3Ø) Fault, with Normal Clearing: 1. Generator 2. Transmission Circuit 3. Transformer Loss of an Element without a Fault.	Single Single Single Single	A/R A/R A/R A/R	A/R A/R A/R A/R	Yes Yes Yes Yes	No <sup>b</sup> No <sup>b</sup> No <sup>b</sup> No <sup>b</sup>	No No No No
	Single Pole Block, Normal Clearing <sup>f</sup> : 4. Single Pole (dc) Line	Single	A/R	A/R	Yes	No <sup>b</sup>	No
C - Event(s) resulting in the loss of two or more (multiple) elements.	SLG Fault, with Normal Clearing <sup>f</sup> : 1. Bus Section 2. Breaker (failure or internal fault)	Multiple Multiple	A/R A/R	A/R A/R	Yes Yes	Planned/Controlled <sup>d</sup> Planned/Controlled <sup>d</sup>	No No
	SLG or 3Ø Fault, with Normal Clearing <sup>f</sup> , Manual System Adjustments, followed by another SLG or 3Ø Fault, with Normal Clearing <sup>f</sup> : 3. Category B (B1, B2, B3, or B4) contingency, manual system adjustments, followed by another Category B (B1, B2, B3, or B4) contingency	Multiple	A/R	A/R	Yes	Planned/Controlled <sup>d</sup>	No
	Bipolar Block, with Normal Clearing <sup>f</sup> : 4. Bipolar (dc) Line Fault (non 3Ø), with Normal Clearing <sup>f</sup> : 5. Any two circuits of a multiple circuit towerline <sup>g</sup>	Multiple Multiple	A/R A/R	A/R A/R	Yes Yes	Planned/Controlled <sup>d</sup> Planned/Controlled <sup>d</sup>	No No
	SLG Fault, with Delayed Clearing <sup>f</sup> (stuck breaker or protection system failure): 6. Generator 7. Transmission Circuit 8. Transformer 9. Bus Section	Multiple Multiple	A/R A/R	A/R A/R	Yes Yes	Planned/Controlled <sup>d</sup> Planned/Controlled <sup>d</sup>	No No

## Attachment 5a

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<p>D<sup>e</sup> B Extreme event resulting in two or more (multiple) elements removed or cascading out of service</p>	<p>3Ø Fault, with Delayed Clearing<sup>f</sup> (stuck breaker or protection system failure):</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1. Generator</td> <td style="width: 50%;">3. Transformer</td> </tr> <tr> <td>2. Transmission Circuit</td> <td>4. Bus Section</td> </tr> </table> <hr style="border-top: 1px dashed black;"/> <p>3Ø Fault, with Normal Clearing<sup>f</sup>:</p> <p>5. Breaker (failure or internal fault)</p> <hr style="border-top: 1px dashed black;"/> <p>Other:</p> <ol style="list-style-type: none"> <li>6. Loss of towerline with three or more circuits</li> <li>7. All transmission lines on a common right-of way</li> <li>8. Loss of a substation (one voltage level plus transformers)</li> <li>9. Loss of a switching station (one voltage level plus transformers)</li> <li>10. Loss of all generating units at a station</li> <li>11. Loss of a large load or major load center</li> <li>12. Failure of a fully redundant special protection system (or remedial action scheme) to operate when required</li> <li>13. Operation, partial operation, or misoperation of a fully redundant special protection system (or remedial action scheme) for an event or condition for which it was not intended to operate</li> <li>14. Impact of severe power swings or oscillations from disturbances in another Regional Council.</li> </ol>	1. Generator	3. Transformer	2. Transmission Circuit	4. Bus Section	<p>Evaluate for risks and consequences.</p> <ul style="list-style-type: none"> <li>▪ May involve substantial loss of customer demand and generation in a widespread area or areas.</li> <li>▪ Portions or all of the interconnected systems may or may not achieve a new, stable operating point.</li> <li>▪ Evaluation of these events may require joint studies with neighboring systems.</li> <li>▪ Document measures or procedures to mitigate the extent and effects of such events.</li> <li>▪ <i>Mitigation or elimination of the risks and consequences of these events shall be at the discretion of the entities responsible for the reliability of the interconnected transmission systems.</i></li> </ul>
1. Generator	3. Transformer					
2. Transmission Circuit	4. Bus Section					

- a) Applicable rating (A/R) refers to the applicable normal and emergency facility thermal rating or system voltage limit as determined and consistently applied by the system or facility owner. Applicable ratings may include emergency ratings applicable for short durations as required to permit operating steps necessary to maintain system control. All ratings must be established consistent with applicable NERC Planning Standards addressing facility ratings.
- b) Planned or controlled interruption of electric supply to radial customers or some local network customers, connected to or supplied by the faulted element or by the affected area, may occur in certain areas without impacting the overall security of the interconnected transmission systems. To prepare for the next contingency, system adjustments are permitted, including curtailments of contracted firm (non-recallable reserved) electric power transfers.
- c) Cascading is the uncontrolled successive loss of system elements triggered by an incident at any location. Cascading results in widespread service interruption which cannot be restrained from sequentially spreading beyond an area predetermined by appropriate studies.
- d) Depending on system design and expected system impacts, the controlled interruption of electric supply to customers (load shedding), the planned removal from service of certain generators, and/or the curtailment of contracted firm (non-recallable reserved) electric power transfers may be necessary to maintain the overall security of the interconnected transmission systems.
- e) A number of extreme contingencies that are listed under Category D and judged to be critical by the transmission planning entity(ies) will be selected for evaluation. It is not expected that all possible facility outages under each listed contingency of Category D will be evaluated.
- f) Normal clearing is when the protection system operates as designed and the fault is cleared in the time normally expected with proper functioning of the installed protection systems. Delayed clearing of a fault is due to failure of any protection system component such as a relay, circuit breaker, or current transformer (CT), and not because of an intentional design delay.
- g) System assessments may exclude these events where multiple circuit towers are used over short distances (e.g., station entrance, river crossings) in accordance with Regional exemption criteria.



## **ATTACHMENT 5b**

Page 1 of 2

### **The Transmission Planning Process**

#### **Step 1: Preparation of System Models**

To prepare system models<sup>1</sup>, regional load profiles must be developed for the current year and for representative years of the ten-year planning horizon. These profiles incorporate the most recent substation load information available. Thus, the distribution planning groups in each region are asked to provide Transmission Planning with historical and projected substation loads and future distribution substation data.

Once the load profiles have been developed, they are used as input into the load flow, fault analysis and stability programs, which simulate and study the behavior of the transmission system. Other major inputs into these programs are the generation dispatch and the base transmission system representation including expected line and equipment performance data. Firm long-term transmission service obligations are incorporated into the programs. The base transmission system representation incorporates existing and planned facilities. In addition, appropriate operating criteria involving voltage limits, generator reactive limits and transformer taps are observed. All major utilities to which FPL is interconnected are also represented.

<sup>1</sup> The models used for this analysis are the Florida Reliability Coordinating Council's year 2002 summer and winter load flow databank cases modeling expected system conditions in year 2005 and 2006. These models are run on Power Technologies Incorporated (PTI) load flow programs which are commonly used and accepted in the electric industry.

## **ATTACHMENT 5b**

Page 2 of 2

### **Step 2: Transmission System Assessment**

Using the system models developed in Step 1, outage contingencies are simulated using load flow and stability programs. These outage contingencies consist of two types as discussed in Attachment 5a: (1) single events with a higher probability of occurrence such as the loss of one transmission line section or autotransformer and (2) multiple events such as the loss of all transmission lines in a common transmission ROW. Generally, the latter event has a lower probability of occurrence but can result in consequences that are more severe. Credible single and multiple contingencies are analyzed. For each of these contingencies, the response of the power system is analyzed and violations of the planning criteria are evaluated.

### **Step 3: Development and Evaluation of Alternatives**

This step addresses potential criteria violations. First, switching techniques and other operational procedures are tested to determine if such actions resolve the problems. If satisfactory operational procedures cannot be implemented, several alternatives for transmission system reinforcements are developed. Cost estimates for the viable alternatives are then determined. Subsequently these alternatives are evaluated (See Attachment 7). During this step, the potential for alternative ROW's, to the extent practicable, are assessed. After evaluating the transmission system project alternatives, the project that best meets the requirements and other considerations is selected.

**ATTACHMENT 6**

Page 1 of 2

**ATTACHMENT 6**

Page 2 of 2

## **Attachment 7**

Page 1 of 3

### **Decision-Making Analysis**

Alternatives are evaluated taking into consideration pertinent factors or categories such as reliability (i.e., electrical performance), cost, construction difficulties, compatibility with long range plans, right-of-way diversity, operational flexibility, and construction feasibility. Each of these important categories is used to compare the alternatives to each other by assigning specific weights to each category for each alternative. The sum of the products for each category will determine which alternative is recommended based on all the pertinent factors.

In this case, the Project met FPL's needs in the most effective manner and, therefore, is the alternative that FPL is pursuing. The following Decision Making Worksheet provides the key elements of the decision-making analysis.

# Attachment 7

Page 2 of 3

## Decision Making Worksheet

DECISION STATEMENT		Provide adequate and reliable service in an economical manner for the Collier area served by the Collier and Orange River 230kV substations.																
OBJECTIVES		ALTERNATIVES: All in service dates are based on the High Band Load forecast																
		I/S YEAR	Project		I/S YEAR	Alternative #I		I/S YEAR	Alternative #II		I/S YEAR	Alternative #V						
		2005	Construct a 230kV Transmission line on a new R/W corridor from Collier to Orange River substations. (Collier-Orange River #3). Construct corresponding line terminal and associated equipment at Orange River and Collier substation.		2005	Construct approximately 37 miles of 230kV Transmission line on existing R/W corridor from Collier to Orange River substations. (Collier Orange River #3). Construct corresponding line terminal and associated equipment at Orange River and Collier substation.		2005	Build a new 500kV station. Construct approximately 42 miles of 500kV Transmission line on new 21 mile R/W corridor to loop the Andytown-Orange River 500kV line into the new station. Install a new 500/230kV, 1500MVA autotransformer at the new station. Loop the existing Collier-Orange River 230kV lines #1 & #2 into the new station by constructing 19.5 miles of double circuit and 12 miles of single circuit.		2005	Build new generation near the Naples load center. Total of 2 CTs: one CT (160MW) in 2005 and the second CT (160MW) in 2007.						
REQUIREMENTS		Yes	No	Information		Yes	No	Information		Yes	No	Information						
Alternatives must provide for reliable service to area customers		X				X				X								
Alternative Plan is feasible to construct		X				X				X								
DESIRES		VL	Score	VL'S	Information		Score	VL'S	Information		Score	VL'S	Information					
Minimize Price (Percent value of revenue requirements)		10.0	7.4	74	\$31,977,867 to \$86,988,419 PVRR		10	100	\$24,823,106 PVRR		1	10	\$137,653,022 PVRR		3.9	39	\$101,000,000 PVRR	
Maximize reliability of service to customers		9.2	9	83	Single contingency causes loss of load. New line mitigates single contingency problems.		9	83	Single contingency causes loss of load. New line mitigates single contingency problems.		10	92	Single contingency causes loss of load. New line mitigates single contingency problems.		9	83	Single contingency causes loss of load. Mitigates single contingency problems.	
Right-of-way diversity		7.8	7	53	Reduces restoration time for loss of the right-of-way south of Orange River.		1	8	Increases the restoration time for the loss of the right-of-way south of Orange River.		10	76	Reduces restoration time for loss of the right-of-way south of Orange River.		4	30	Does not impact restoration time for the loss of the right-of-way South of Orange River	
Maximize compatibility with Long range plans.		6.1	10	51	May allow for efficient future load growth by providing service to future distribution stations.		5	31	Does not allow for efficient integration to serve future distribution substations.		6	37	Improves load serving capability and allows for minimal integration to serve future distribution substations in South Collier County.		5	31	Allows for future load growth but does not provide efficient service to serve future distribution stations.	
Provides operational flexibility		5.3	8	42	Provides maximum operational flexibility.		6	32	Provides less operational flexibility for maintenance.		9	48	Provides maximum operational flexibility.		10	53	Provides maximum operational flexibility by providing a source from Collier.	
Minimize construction difficulties		4.9	5	25	Requires minimum line clearances. Transmission route may pass near protected, commercial, and residential areas. EMF mitigation.		10	49	Requires minimum line clearances.		2	10	Requires minimum line clearances. Transmission route may pass near protected, commercial, and residential areas. EMF mitigation.		1	5	Requires some line clearances for the integration of the new generation. Siting generation in the Collier area problematic.	
<b>TOTAL VALUE SCORE</b>		<b>338</b>		<b>PREFERRED ALTERNATIVE **</b>				<b>302</b>		<b>272</b>		<b>241</b>						

# Attachment 7

Page 3 of 3

## Decision Making Worksheet

<b>DECISION STATEMENT</b>		Provide adequate and reliable service in an economical manner for the Collier area served by the Collier and Orange River 230kV substations.										
<b>OBJECTIVES</b>		<b>ALTERNATIVES:</b> All in service dates are based on the High Band Load forecast										
		<b>I/S YEAR</b>	<b>Alternative # III</b>			<b>I/S YEAR</b>	<b>Alternative #IV</b>			<b>I/S YEAR</b>		
		2005	Construct approximately 19.4 miles of 230kV Transmission line on existing R/W corridor from Alice to Orange River substations. Install a new 230/138kV, 224MVA autotransformer at Alice. Construct corresponding line terminal and associated equipment at Oran			2005	Construct approximately 48 miles of 138kV Transmission line on a new R/W corridor from Ft. Myers to Collier substations. Construct corresponding line terminal and associated equipment at Ft. Myers and Collier substation.					
<b>REQUIREMENTS</b>		Yes	No	<b>Information</b>			Yes	No	<b>Information</b>			
Alternative must provide for reliable service to area customers			X	Does not meet NERC planning criteria.				X	Does not meet NERC planning criteria.			
Alternative Plan is feasible to construct		X					X					
<b>DESIRES</b>		<b>VL</b>	<b>Score</b>	<b>VL'S</b>	<b>Information</b>			<b>Score</b>	<b>VL'S</b>	<b>Information</b>		
Minimize Price (Present value of revenue requirements)		10.0										
Maximize reliability of service to customers		9.2										
Right-of-way diversity		7.0										
Maximize compatibility with Long range plans.		6.1										
Provides operational flexibility		6.3										
Minimize construction difficulties		4.0										
<b>TOTAL VALUE SCORE</b>												

**ATTACHMENT 8**

**Page 1 of 3**

**Load Flow Project Summary Table  
(From Load Flow Diagrams in Appendix A)**



**ATTACHMENT 8**

**Page 2 of 3**

**Load Flow Project Summary Table  
(From Load Flow Diagrams in Appendix A)**

**ATTACHMENT 8**

**Page 3 of 3**

**Load Flow Project Summary Table  
(From Load Flow Diagrams in Appendix A)**

**EXHIBIT "A"**  
**(REDACTED)**

**Appendices A & B**

**FLORIDA POWER & LIGHT  
COMPANY'S PETITION TO DETERMINE  
NEED FOR:**

**THE COLLIER-ORANGE  
RIVER #3 PROJECT**

**DOCKET NO. 030084-EI**

**FEBRUARY 26, 2003**



**FPL**

# APPENDIX A

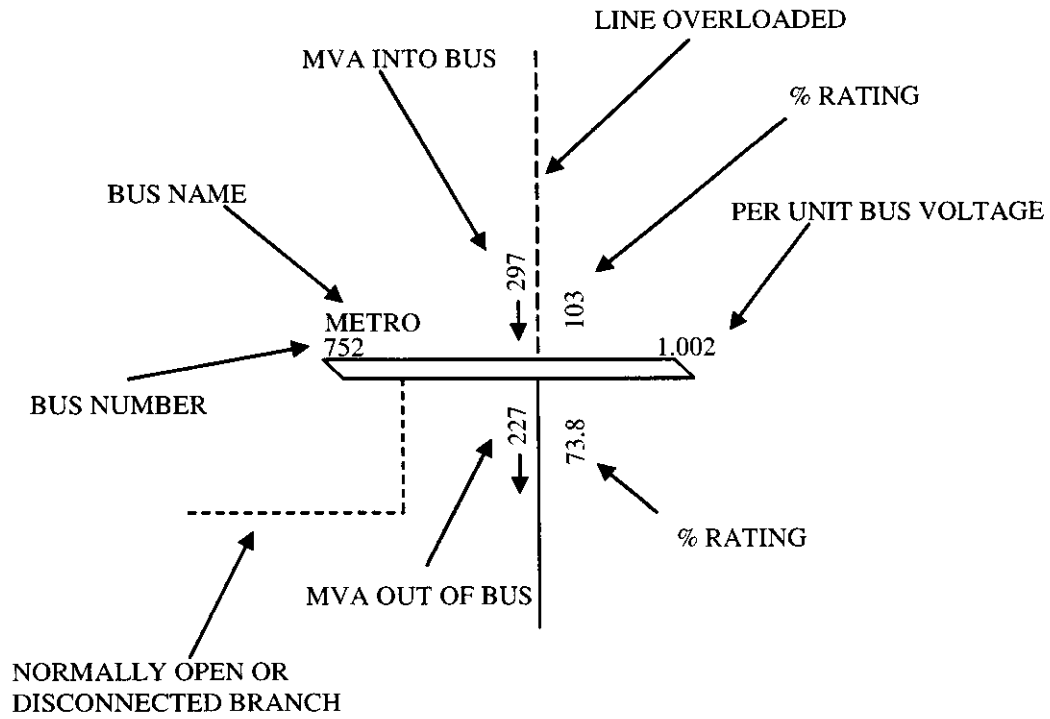
## Load Flow Diagrams – With and Without Project

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Load Flow Diagram Key	A.1
<b>Load Flow Maps without the Project</b>	
Winter 2005/06 Base case	A.2
Winter 2005/06 Loss of Alico 230/138kV autotransformer	A.3
Winter 2005/06 Loss of Alico-Metro 138kV line section	A.4
Winter 2005/06 Loss of Colonial-Edison 138kV line section	A.5
Winter 2005/06 Loss of Colonial-Ft. Myers 138kV line section	A.6
Winter 2005/06 Loss of Ft. Myers-Ft. Myers TP 138kV line section	A.7
Winter 2005/06 Loss of Buckingham-Ft. Myers 138kV line section	A.8
Winter 2005/06 Loss of Ft. Myers TP-Winkler 138kV line section	A.9
Winter 2005/06 Loss of Metro-Winkler 138kV line section	A.10
Winter 2005/06 Loss of Collier-Livingston 230kV line section	A.11
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Summer 2006 Base case	A.14
Summer 2006 Loss of Jetport-Orange River 230kV line section	A.15
<b>Load Flow Maps with the Project</b>	
Winter 2005/06 Base case	A.16
Summer 2006 Base case	A.17
Winter 2005/06 Loss of Jetport-Orange River 230kV line section	A.18

Winter 2005/06 Loss of Jetport-San Carlos 230kV line section	A.19
Winter 2005/06 Loss of Orange River-Vanderbilt 230kV line section	A.20
Winter 2005/06 Loss of Corkscrew-Orange River 230kV line section	A.21
Winter 2005/06 Loss of Livingston-Orangetree Tap 230kV line section	A.22
Winter 2005/06 Loss of Corkscrew-Orangetree Tap 230kV line section	A.23
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Winter 2005/06 Loss of Alico-Metro 138kV line section	A.25
Winter 2005/06 Loss of Colonial-Edison 138kV line section	A.26
Winter 2005/06 Loss of Colonial-Ft. Myers 138kV line section	A.27
Winter 2005/06 Loss of Ft. Myers-Ft. Myers TP 138kV line section	A.28
Winter 2005/06 Loss of Buckingham-Ft. Myers 138kV line section	A.29
Winter 2005/06 Loss of Ft. Myers TP-Winkler 138kV line section	A.30
Winter 2005/06 Loss of Metro-Winkler 138kV line section	A.31
Winter 2005/06 Loss of Collier-Livingston 230kV line section	A.32
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Winter 2005/06 Loss of Alico-San Carlos 230kV line section	A.34
Summer 2006 Loss of Jetport-Orange River 230kV line section	A.35

# Loadflow Diagram Key



**PAGES A.2 - A.35 REDACTED**

## APPENDIX B

### Load Flow Diagrams – Alternatives

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<b>Load Flow Maps with Alternative I</b>	
Winter 2005/06 Base case	B.1
Summer 2006 Base case	B.2
Winter 2005/06 Loss of Jetport-Orange River 230kV line section	B.3
Winter 2005/06 Loss of Jetport-San Carlos 230kV line section	B.4
Winter 2005/06 Loss of Orange River-Vanderbilt 230kV line section	B.5
Winter 2005/06 Loss of Corkscrew-Orange River 230kV line section	B.6
Winter 2005/06 Loss of Livingston-Orangetree Tap 230kV line section	B.7
Winter 2005/06 Loss of Corkscrew-Orangetree Tap 230kV line section	B.8
Winter 2005/06 Loss of Alico 230/138kV autotransformer	B.9
Winter 2005/06 Loss of Alico-Metro 138kV line section	B.10
Winter 2005/06 Loss of Colonial-Edison 138kV line section	B.11
Winter 2005/06 Loss of Colonial-Ft. Myers 138kV line section	B.12
Winter 2005/06 Loss of Ft. Myers-Ft. Myers TP 138kV line section	B.13
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Summer 2006 Loss of Jetport-Orange River 230kV line section B.20

**Load Flow Maps with Alternative III**

Winter 2008/09 Loss of Orange River-Vanderbilt 230kV line section B.21

Winter 2008/09 Loss of Orange River-Corkscrew 230kV line section B.22

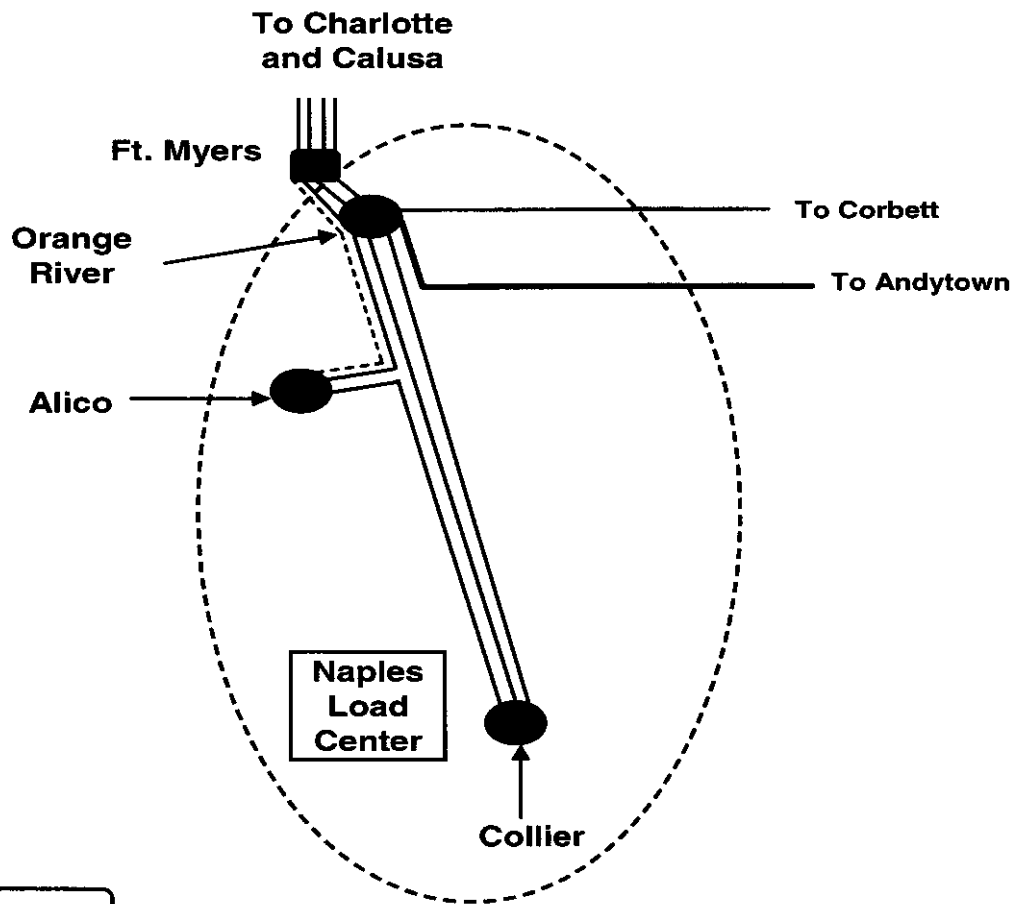
**Load Flow Maps with Alternative IV**

Winter 2005/06 Loss of Jetport-San Carlos 230kV line section B.23

Winter 2005/06 Loss of Alico-San Carlos 230kV line section B.24

**PAGES B.1 – B.24 REDACTED**

# ILLUSTRATION ELECTRICAL PENINSULA



LEGEND	
	500kV LINE
	230kV LINE
	138kV LINE
	MAJOR TRANSMISSION STATIONS
	POWER PLANTS
	AREA SOUTH OF FT. MYERS

FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET  
NO. 030084-EI EXHIBIT NO. 3  
COMPANY/  
WITNESS: FP+L/Schoneck  
DATE: 04-08-03

# COMPOSITE EXHIBIT NO. 1

DOCKET NO: 030084-EI - PETITION FOR  
DETERMINATION OF NEED FOR  
COLLIER-ORANGE RIVER 230 KV  
TRANSMISSION LINE IN COLLIER,  
HENDRY, AND LEE COUNTIES, BY  
FLORIDA POWER & LIGHT COMPANY.

DESCRIPTION: COMPOSITE EXHIBIT CONSISTING OF  
THE TELEPHONIC DEPOSITION OF  
WILLIAM ROBERT SCHONECK, THE  
DEPOSITION OF C. MARTIN MENNES,  
AND FPL'S RESPONSES TO STAFF'S  
FIRST SET OF INTERROGATORIES  
NOS. 1-6

PROFFERING PARTY: STAFF

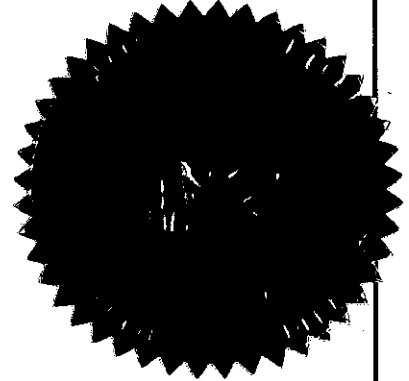
FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET  
NO. 030084-EI EXHIBIT NO. 4  
COMPANY/  
WITNESS. F.P.S.C. Staff  
DATE: 04-08-03

BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030084-EI

In the Matter of

PETITION FOR DETERMINATION OF  
NEED FOR COLLIER-ORANGE RIVER  
230 kV TRANSMISSION LINE IN  
COLLIER, HENDRY, AND LEE COUNTIES,  
BY FLORIDA POWER & LIGHT COMPANY.



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A CONVENIENCE COPY ONLY AND ARE NOT  
THE OFFICIAL TRANSCRIPT OF THE HEARING,  
THE .PDF VERSION INCLUDES PREFILED TESTIMONY.

TELEPHONIC  
DEPOSITION OF: WILLIAM ROBERT SCHONECK  
Located in Miami, Florida

TAKEN AT THE  
INSTANCE OF: The Staff of the Florida  
Public Service Commission

PLACE: Gerald L. Gunter Building  
2540 Shumard Oak Boulevard  
Room 362  
Tallahassee, Florida

TIME: Commenced at 10:05 a.m.  
Concluded at 3:55 p.m.

DATE: Friday, April 4, 2003

REPORTED BY: TRICIA DeMARTE, RPR  
LINDA BOLES, RPR  
Official FPSC Reporters

## 1 APPEARANCES:

2 KENNETH A. HOFFMAN, ESQUIRE, Rutledge, Ecenia,  
3 Purnell & Hoffman, P.A., P. O. Box 511, Tallahassee, Florida  
4 32302, appearing on behalf of Florida Power & Light Company,  
5 participating telephonically.

6 ROBERT SCHEFFEL WRIGHT, ESQUIRE, Landers &  
7 Parsons, P.A., P. O. Box 271, Tallahassee, Florida 32302,  
8 appearing on behalf of Barron Collier Companies, participating  
9 telephonically.

10 LAWRENCE D. HARRIS, ESQUIRE, FPSC General  
11 Counsel's Office, 2540 Shumard Oak Boulevard, Tallahassee,  
12 Florida 32399-0850, appearing on behalf of the Commission  
13 Staff.

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## I N D E X

## MISCELLANEOUS

		PAGE NO.
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4	STIPULATION	5
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## WITNESS

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NAME:

PAGE NO.

9

10 WILLIAM ROBERT SCHONECK

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21	ERRATA SHEET	95
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22	CERTIFICATE OF REPORTERS	96
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EXHIBITS

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NUMBER:		ID.
1	(Late-Filed) MVA Ratings for New Lines	18
2	(Late-Filed) CPV RR Calculations	23
3	System Map	68



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S T I P U L A T I O N

IT IS STIPULATED that this deposition was taken pursuant to notice in accordance with the applicable Florida Rules of Civil Procedure; that counsel present stipulate that the witness is the person he identified himself as; that objections, except as to the form of the question, are reserved until hearing in this cause; and that reading and signing was not waived.

IT IS ALSO STIPULATED that any off-the-record conversations are with the consent of the deponent.

## P R O C E E D I N G S

1  
2 MR. HARRIS: We need to get the witness to execute a  
3 document that certifies he's taking an oath down there. If you  
4 don't have one, I can fax one down to you if you-all give me a  
5 number.

6 MR. HOFFMAN: I have it.

7 MR. HARRIS: Okay. And do you-all have somebody  
8 there who can administer an oath?

9 MR. HOFFMAN: Yes, we do.

10 MR. HARRIS: Is this Mr. Schoneck?

11 MR. SCHONECK: Yes, I'm here.

12 MR. HARRIS: Okay. If you can go ahead and get  
13 sworn.

14 (Witness sworn.)

15 MR. HARRIS: Okay. And I would ask that you-all  
16 execute that certificate at some point and get it sent back up  
17 here to me, so we can attach it to the deposition.

18 MR. HOFFMAN: Okay.

19 MR. HARRIS: Okay. That would be great.

20 WILLIAM ROBERT SCHONECK

21 called as a witness telephonically and sworn to tell the truth  
22 by the notary present with the witness, testified as follows:

23 DIRECT EXAMINATION

24 BY MR. HARRIS:

25 Q My name is Larry Harris, and I'm the attorney who's

1 handling this case for the Florida Public Service Commission.  
2 Also present with me is Mike Haff who's the staff member on  
3 this case. Is Mr. William Schoneck there?

4 A Yes, I am.

5 Q Okay. And do you have a business address?

6 A Yes, 4200 West Flagler, Miami, Florida 33134.

7 Q Okay. And are you employed by Florida Power & Light  
8 Company?

9 A Yes, I am.

10 Q In what capacity?

11 A I'm the manager of transmission planning.

12 Q Have you filed testimony in Docket Number 030084-EI?

13 A Yes, I have.

14 Q Do you have any changes to your testimony that you  
15 filed?

16 A No, I do not.

17 Q Okay. Can you hear me okay? I just thought I'd ask  
18 that question.

19 A Yes, I can hear you fine.

20 Q Great, great. We sometimes have problems with these  
21 phones. I just have a few questions for you on -- they're on a  
22 couple of different areas.

23 A Okay.

24 Q The first area I'd like to ask you about is, did  
25 you --

1 MR. HOFFMAN: Larry, excuse me. Before we get into  
2 your questions, could I just note one little typo in  
3 Mr. Schoneck's testimony?

4 MR. HARRIS: Sure.

5 MR. HOFFMAN: Okay. Just to make sure we're clean on  
6 that. Page 20, Line 13, we're going to go ahead and change  
7 "denail" to "denial."

8 MR. HARRIS: Okay. We got it.

9 MR. HOFFMAN: Okay. Thank you. I just want to make  
10 sure we're clean on that.

11 MR. HARRIS: It's in caps, too. All right.

12 BY MR. HARRIS:

13 Q Okay. Mr. Schoneck, are you aware of staff serving  
14 some interrogatories on Florida Power & Light Company in this  
15 docket?

16 A Yes, I am.

17 Q And do you have any knowledge of the Interrogatories  
18 1 through, I believe, 5 and the responses -- 1 through 6 and  
19 the responses Florida Power & Light had filed to those?

20 A Yes, I do.

21 Q The first question would refer to the Interrogatory  
22 Number 1. If you have a copy of that there.

23 A Yes, I have that.

24 Q Okay. The answer -- about halfway down, you -- the  
25 answer starts talking about the 2002 transmission planning

1 assessment, after considering the growing load in this area and  
2 the magnitude of the problems identified, FPL concluded in the  
3 summer of 2002 that it could no longer adequately address the  
4 growing overload and voltage concerns through the  
5 above-mentioned types of solutions and determined it to be  
6 necessary to add a new 230 kV line from Orange River.

7           Do you have any type of -- okay. Let me rephrase  
8 my -- let me ask a question. Is this transmission study,  
9 2002 planning assessment, the first time you-all determined  
10 that you had the need for a new 230 kilovolt line?

11           A     That's when we found the concerns that we identified  
12 the need in this particular case for a 230 kV line from Orange  
13 River to Collier.

14           Q     Okay. At any time prior to that planning assessment,  
15 did FPL have any idea they were going to need an additional  
16 line from the Orange River to Collier substations?

17           A     I think that, you know, looking back that because of  
18 the load growth in this area -- it is the most rapid growing  
19 area in our service territory -- that we knew that in the  
20 future that we would have to make some improvements, but we had  
21 not identified specifically this particular fix at this time.

22           Q     Okay. Do you happen to know what the load growth is  
23 for that particular area?

24           A     Are you asking forecasted or what it has been over  
25 the last ten years, say? Because I think --

1 Q Both, the historical and then the forecasted.

2 A Yes, I have that. And that's on --

3 MR. HOFFMAN: Excuse me, Larry. While Mr. Schoneck  
4 is finding that information, I just want to note for the record  
5 that Renee Deaton (phonetic) with FPL is also in the room.

6 MR. HARRIS: Okay. Thank you.

7 MR. HOFFMAN: You're welcome.

8 THE WITNESS: Yes. On the Attachment 3 to the  
9 Exhibit A, for this area south of Fort Myers, the historical  
10 growth in this area has been over the last 11 years around  
11 5 percent, and it's forecasted to grow at about 3 percent. And  
12 these are winter numbers. And for the summer, those  
13 corresponding numbers historically were 4.62 and 3.72 percent.

14 BY MR. HARRIS:

15 Q Okay. And I believe in your direct testimony you  
16 discuss a little bit that FPL conducts transmission planning on  
17 a yearly basis; is that correct?

18 A Yeah. Each year we update our models based on more  
19 current data, and we basically do an assessment with those  
20 changes in data.

21 Q As a follow-up to the question I asked you earlier,  
22 if you do these plans every year, this transmission planning  
23 every year, and you new that you had a 4.62 percent historical  
24 growth rate, that's for your Attachment Number 3, why did the  
25 need for the new line not become apparent until your

1 transmission planning in 2002?

2 A We did not -- in prior years we had not looked out at  
3 the winter of 2006 which is in this case, so we probably didn't  
4 see it. We did look at it in the 2002 assessment and that's  
5 where the need arose.

6 Q How far forward do you generally look in these  
7 transmission planning assessments?

8 A Okay. We did look at the summer of 2006 in the 2001  
9 assessment period.

10 Q So would it be fair to say you look forward by about  
11 five years in your transmission planning assessments?

12 A We try to look out -- I think a five-year is when we  
13 feel the data that we have is fairly reasonable. When you get  
14 beyond that, some of the assumptions are highly susceptible to  
15 change, and therefore, a lot of the data that you have, you  
16 know, you wouldn't come up with a very reasonable plan.

17 Q You said you -- I believe you said just a minute ago  
18 you looked at the summer of 2006 during the 2001 assessment?

19 A Yes.

20 Q Okay. Wouldn't the winter of 2005/2006 come before  
21 the summer of 2006?

22 A Yeah, but we did not actually look at a snapshot of  
23 the winter of the 2006.

24 Q Okay. So would it be fair to say that as part of  
25 Florida Power & Light's transmission planning you select

1 different times of the year to look at going forward?

2 A We may not -- when we do an assessment, we may not  
3 look at every single year during that horizon. In the 2002  
4 assessment, I believe we did look at all of the years  
5 '03 through '07. However, sometimes what we'll do as part of  
6 the assessment, if there's not a change, a major change in the  
7 system, you know, you're not adding generation, we may skip a  
8 particular year because it's similar to the year before. So we  
9 may not have looked at every single one. But I do have here  
10 what cases we did look at for the 2002 assessment.

11 Q Is that in a document form?

12 A No. It was just based on looking back at what years  
13 I looked at for 2002.

14 Q Could you run through that briefly for me?

15 A Yes. For the summer, I looked at years '03, '04,  
16 '05, '06, and '07. And for the winter, I looked at '03, '04,  
17 '05, '06, and '07.

18 Q Was that the winter of 2002/2003 or just 2003? On  
19 your winter you said, I think, '03. Did you mean the winter of  
20 2002/2003 or just, I guess, beginning in January of 2003?

21 A Let me try to clarify when I say the -- the winter  
22 starts, like, the 15th of December of the prior year.

23 Q Okay. Good.

24 A Okay. So it would be -- that's what we refer to,  
25 like, the '05/'06. What we mean is, like, the 15th of December



1 through, let's say, the following March of '06, that's more the  
2 winter time frame, because you can't have a winter peak during  
3 that period.

4 Q Okay. So the winter of '03 would begin December 15th  
5 of '02; is that correct?

6 A That's correct.

7 Q Okay. I guess my understanding of your testimony at  
8 this point is that there's some degree of selection process  
9 that somebody makes at Florida Power & Light as to what  
10 particular periods or years or sections of years you're going  
11 to look at in the future. Is that a fair characterization?

12 A Yes, it is.

13 Q Is there any policy on what portions of years or  
14 years you choose to look at?

15 A There is no such policy. I think it's more of an  
16 engineering judgment that our engineers when they're putting  
17 these cases together that they're looking in the modeling, and  
18 if they see changes in a particular year, they want to capture  
19 that.

20 Q Who makes the decision as to what part of a year to  
21 look at?

22 A That would be some of the engineers that work for  
23 myself.

24 Q Do you have ultimate responsibility for making sure  
25 that the appropriate years and portions of years are looked at?

1 A I would -- they would review that with me, yes.

2 Q Who would have the ultimate responsibility for  
3 determining whether the transmission planning assessment  
4 covered the appropriate years or portion of years in the  
5 future?

6 A I assume I would.

7 Q Okay. Who do you report to directly?

8 A I report to Mr. Marty Mennes.

9 Q Would Mr. Mennes have the authority to tell you that  
10 he did not believe you had appropriately covered a future year  
11 or portion of a year?

12 A Yes, he would.

13 Q Would he have the authority to ask you to go back and  
14 do a study for a year or a portion of year in the future?

15 A Yes, he would.

16 MR. HARRIS: All right. If I might have a minute,  
17 Ken.

18 MR. HOFFMAN: Sure.

19 (Off the record.)

20 BY MR. HARRIS:

21 Q Getting back to the first interrogatory response, the  
22 portion that I quoted to you a little earlier. It's about  
23 two-thirds of the way through the paragraph. The sentence,  
24 "FPL concluded in the summer of 2002," could you, Mr. Schoneck,  
25 if you have any personal knowledge, give me a little bit of

1 information on how you-all -- what you-all concluded and what  
2 information you used to reach a conclusion?

3 A Yes. I think that if you looked at -- actually  
4 table -- Page 11 of Exhibit A in tables on Page 11 and also  
5 Page 12 and 13 is kind of the summary of what the findings were  
6 on the assessment that we did for the need for the new line  
7 from Orange River to Collier.

8 Q Okay. And so would it be fair to conclude that  
9 documentation for these conclusions would be the load flow  
10 studies?

11 A Yes. This is a summary format of what is contained  
12 in the load flow studies and also on -- I guess it's Attachment  
13 8.

14 Q Okay. On Page 13, I see that you have a second --  
15 the first column is "Outage of Transmission Facility," the  
16 second column is "Estimated Customers Affected in 2005." Could  
17 you explain to me how you-all determined the estimate of the  
18 customers affected?

19 A Yeah. That -- basically the -- we converted the  
20 number of megawatts into customers, and this is using winter  
21 numbers because it's the winter of '05/'06, and that conversion  
22 factor is 166 customers per megawatt.

23 Q Okay. So it was a straightforward formula basically?

24 A Yes.

25 Q Okay. In the second staff interrogatory that we

1 asked, the answer to it provides a table, and it's titled,  
2 "Southwest Florida Area Transmission Projects, Completed  
3 Projects (1/1997 through 12/2002)." And in the first and  
4 second columns -- well, the first column is a list of -- is the  
5 title, I guess, of the project. The second column says, "From  
6 (MVA)," and the third column, "To (MVA)." And some of the  
7 entries are left blank. I was wondering if you had or had  
8 access to or could explain why the -- either had or had access  
9 to numbers for those blank entries or could explain to me why  
10 those entries are left blank?

11 A Yes, I'd be happy to. In the ones -- the ones that  
12 have numbers in are line upgrades. We're asking basically for  
13 it to change the rating of the facility, for example, in the  
14 first one from 129 MVA to 287 MVA. Okay? On the first blank,  
15 which is called the Collier to Alligator 138 kV alternate feed,  
16 we're actually, you know, constructing three miles of a  
17 transmission line for an alternate feed. So we're not asking  
18 for an upgrade of a specific line.

19 Going down a little bit further, where you see the  
20 next blanks on the MVA, you'll see add 55 MVAR cap bank at  
21 Collier. That's to improve the voltage in the Collier area, so  
22 we're adding a capacitor bank. So we're not asking for a line  
23 upgrade.

24 The next one down is 90 MVAR cap banks at Calusa.  
25 Same basic answer there. We're adding cap banks for voltage

1 support. So I guess in summary -- I can go through each one of  
2 these, but in summary, if it's a cap bank, you're not asking  
3 for a line upgrade. And if you're asking for a section of line  
4 under the mile section, you wouldn't be asking for a line  
5 upgrade.

6 Q Okay. Great. So basically for the new lines, the  
7 feeds and things like that, you'd be going from zero to  
8 something under those MVA columns; is that correct? It's not  
9 an upgrade. It would be zero for no line, and then whatever  
10 the line was would be what you were going to; right?

11 A Well, the first column, MVA, would be the existing  
12 rating. For example, the Fort Myers tap to Fort Myers sub 138  
13 kV, we're saying the existing rating of the line is 129, and  
14 we're asking it to be upgraded so it can handle 287.

15 Q Right. But for the third entry, the Collier to  
16 Alligator 138 kV alternate feed, it's blank under the MVA.  
17 Would it be fair to say that the "from" would be zero and the  
18 "to" would be whatever the new rating for that feed was going  
19 to be?

20 A It would have been whatever was requested for that  
21 three miles of line whatever it was built to.

22 Q So it would be basically the MVA capacity of that new  
23 three-mile segment of line?

24 A Yes, whatever we had asked for.

25 Q Do you have access to what those numbers would be?

1 A As a matter of fact, it's 166 MVA.

2 Q For all of those blank "from" and "to" columns that  
3 are new lines, could you provide us as a late-filed exhibit  
4 those numbers, the MVA ranking for those new lines?

5 A We'd be happy to do that.

6 Q That would be wonderful.

7 (Late-Filed Deposition Exhibit 1 identified.)

8 BY MR. HARRIS:

9 Q And then the next question I was going to ask you is  
10 basically Interrogatory Number 3, and it's the same type of  
11 column for future projects, and I was going to ask you the same  
12 questions you just have gone through. And could I ask you for  
13 the same type of late-filed exhibit for the new line additions  
14 that you have indicated in that section?

15 A We'd be happy to do that.

16 Q And I think there's just one that you have marked,  
17 the Collier to Orange River #3. And that's this project;  
18 correct?

19 A Yes.

20 Q Okay. And so I guess you won't have to give me one  
21 now because it's in your project justification.

22 A Yeah. I think it's -- if I remember correctly, I  
23 think it's 759 MVA, but I think it's in the petition.

24 Q It's in your documentation, yes.

25 MR. HOFFMAN: So, Larry, we don't need --

1 MR. HARRIS: You don't need that, no.

2 MR. HOFFMAN: Eliminate Late-Filed Exhibit 2?

3 MR. HARRIS: Yes. Well, there will be another one, I  
4 hope.

5 MR. HOFFMAN: Okay.

6 BY MR. HARRIS:

7 Q I wanted to ask you a question about that table,  
8 actually, that's contained in your answer to -- or FPL's answer  
9 to Interrogatory Request Number 3 and that is the Terry  
10 Substation 230 to 138 kV sub/autotx.

11 A Right.

12 Q And that is blank all the way through, and I wondered  
13 if you could explain to me what that is?

14 A Okay. We're building a new Terry Substation, okay?

15 Q Okay.

16 A And there's a transformer that -- sub/auto is an  
17 autotransformer that we're putting in injections off of the  
18 Alico to Collier line to a new transmission station, and we're  
19 dropping it down from 230 kV -- this is where the  
20 transformation for the auto is -- to 138 kV to a new Terry  
21 Substation for an injection into the 138 kV system.

22 Q Okay. Great. Thank you. That explains that  
23 question. And to inform you-all, Judy Harlow just stepped in.  
24 She's the assisting staffer on this case.

25 For Interrogatory Number 4, FPL's response to Staff's

1 Interrogatory Number 4, the answer states in part -- I'm  
2 reading a portion of it; it's basically the second and third  
3 lines. All of the transmission projects identified in  
4 Interrogatories Number 2 and Number 3 would still be needed in  
5 order to (1) mitigate other overload and voltage concerns that  
6 are not addressed by the proposed Collier-Orange River project.  
7 Could you briefly specifically tell me what those overloads,  
8 voltage concerns are and what you mean by mitigating them?

9 A Okay. The project is targeted for certain overloads  
10 as we have on Attachment 8, and they specifically address  
11 those. However, there are other projects that we have needed  
12 to serve the load in this area, and those are addressed by  
13 these other projects that we're talking about. And we just  
14 left Question Number 3 which listed the other upgrades and cap  
15 banks that we're adding in this area in order to serve the load  
16 growth that it's not -- it's in more of the local area.

17 The 230 kV line from Orange River-Collier is kind of  
18 like your backbone, and then you've got to further distribute  
19 the power to the local load centers. And these other projects  
20 are targeted to some of those sections.

21 Q So my understanding then would be building the  
22 Collier to Orange River Project doesn't eliminate the need for  
23 the projects you've listed in the answer to Interrogatory  
24 Number 3; that's correct?

25 A That is correct.



1 Q And those projects in the Interrogatory Response  
2 Number 3 are to mitigate additional concerns you have either to  
3 overloads or voltages or contingencies; is that correct?

4 A That is correct.

5 MR. HARRIS: If I might have just a minute.

6 (Off the record.)

7 BY MR. HARRIS:

8 Q Okay. I don't want to ask any follow-ups about that.  
9 FPL's response to interrogatory number -- Staff's Interrogatory  
10 Number 5, in the first paragraph of the response, the number of  
11 101 million net present value is given. And that, I believe,  
12 is the -- basically the cost of a new generation for the Naples  
13 load center; is that correct?

14 A That is correct.

15 Q Would it be possible to get a late-filed exhibit that  
16 gives a table with the cumulative net present value -- or I'm  
17 sorry, the cumulative present value of revenue requirements  
18 that support that calculation, the 101 million net present  
19 value? And that would be in 2003 dollars.

20 A I have a document -- I did not run these numbers.  
21 Our generation group actually provided this input, and I have a  
22 correspondence here of exactly -- I guess the process they went  
23 through to come up with this number. I assume that they should  
24 have where this number was derived from, but I don't have that  
25 in my possession. I do have the rationale that they used for

1 deriving --

2 MR. HARRIS: If we could go off the record for a  
3 second.

4 (Discussion off the record.)

5 MR. HOFFMAN: Bob, I don't know. I mean, all I can  
6 do is commit to try to see if it's there.

7 MR. WRIGHT: (Inaudible.)

8 BY MR. HARRIS:

9 Q So the answer to my question is, you-all will see if  
10 you can find this information and get it to staff somehow, but  
11 since you, Mr. Schoneck, didn't generate these numbers and  
12 don't have it, you can't tell me right now that you have any  
13 personal knowledge or can provide this document; is that  
14 correct?

15 A That is correct.

16 Q Okay.

17 MR. HOFFMAN: And just so we're clear, Larry, what I  
18 understand is, staff is requesting a late-filed exhibit in the  
19 form of a table that would show the cumulative present value  
20 revenue requirement calculation in 2003 dollars that supports  
21 the \$101 million figure that you previously referenced; is that  
22 correct?

23 MR. HARRIS: That's correct. And it would be in an  
24 annual entry basis, annual numbers. And just for -- it might  
25 help you. Dr. Sim, who worked on the Martin and Manatee need

1 determination, was able to provide us with those kind of  
2 tables, and he'll know what I'm -- you know, we went over with  
3 him, so he'll be able to tell you how crazy I am in what I'm  
4 asking for.

5 MR. HOFFMAN: Okay. Well, I don't need to ask him  
6 about that to know that.

7 MR. HARRIS: Right. But if you ask him, he'll be  
8 able to tell you that I don't speak so well on this, but he'll  
9 be able to show you what kind of a table I'm looking for.

10 MR. HOFFMAN: Yes. And I just want to make it clear  
11 that I can't confirm today that we have that information --

12 MR. HARRIS: Right. And if you don't, that's fine.

13 MR. HOFFMAN: -- but I can assure staff that we will  
14 make every effort to find out if the information is available  
15 and develop the calculations that staff is requesting.

16 MR. HARRIS: That's good enough for me.

17 MR. HOFFMAN: Okay.

18 (Late-Filed Deposition Exhibit 2 identified.)

19 BY MR. HARRIS:

20 Q And just to go back to what we started with, I had  
21 one final question for you. I think that will probably end up  
22 the questions I had, and that's basically -- well, it's going  
23 to be two parts. Mr. Schoneck, are you familiar with the  
24 ten-year site plan process that the Commission does every year?

25 A I'm familiar that Florida Power & Light has a

1 ten-year site plan.

2 Q Is it your testimony that the -- that Florida Power &  
3 Light did not identify a need for a new line from Orange River  
4 to Collier until the 2002 transmission planning assessment?

5 A Yes, it is.

6 Q And that happened -- and would you agree in general  
7 that that probably happened after the 2002 ten-year site plan  
8 was filed in April of 2002?

9 A Yes, I would.

10 MR. HARRIS: Okay. If I might have just a minute.

11 MR. HOFFMAN: Sure.

12 (Off the record.)

13 MR. HARRIS: Okay. That's all the questions I have.

14 Thank you for your help.

15 MR. SCHONECK: Thank you.

16 CROSS EXAMINATION

17 BY MR. WRIGHT:

18 Q Good morning, Mr. Schoneck.

19 A Good morning.

20 Q We introduced ourselves --

21 MR. HARRIS: And we can barely hear you, Schef. So  
22 if you could get closer to the phone or whatever.

23 MR. WRIGHT: Sure. I apologize for that.

24 BY MR. WRIGHT:

25 Q I was just saying, good morning, Mr. Schoneck. We

STATE OF Florida  
COUNTY OF Dade

CERTIFICATE OF OATH

I, the undersigned authority, certify that William Schoneck  
personally appeared before me at M 9250 W Flagler Street  
Miami, Florida  
and was duly sworn by me to tell the truth.

WITNESS my hand and official seal in the City of Miami,  
County of Dade, State of Florida, this 4th  
day of April, 2003.

Brendy James  
Notary Public  
State of Florida

# CE 852150  
Exp. 8/24/2003

Personally known \_\_\_\_\_ OR produced identification

Type of identification produced \_\_\_\_\_



1 STATE OF FLORIDA     )  
2 COUNTY OF LEON        )

## CERTIFICATE OF REPORTERS

3

4 WE, TRICIA DEMARTE, RPR, and LINDA BOLES, RPR, Official  
5 FPSC Commission Reporters, do hereby certify that we were  
6 authorized to and did stenographically report the foregoing  
7 deposition at the time and place herein stated.

6

7 WE FURTHER CERTIFY that this transcript, consisting of 94  
8 pages, constitutes a true record of the testimony given by the  
9 witness.

8

9 WE FURTHER CERTIFY that we are not a relative, employee,  
10 attorney or counsel of any of the parties, nor are we a  
11 relative or employee of any of the parties' attorney or counsel  
12 connected with the action, nor are we financially interested in  
13 the action.

11

DATED THIS 7th DAY OF APRIL, 2003.

12

13

*Tricia Demarte*  
\_\_\_\_\_  
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Official FPSC Reporter  
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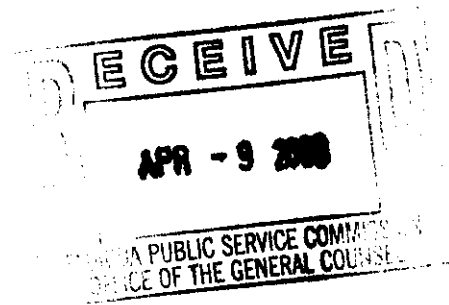
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April 9, 2003

**BY HAND DELIVERY**

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2540 Shumard Oak Boulevard  
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Re: Docket No. 030084-EI

Dear Larry:

Enclosed is the Errata Sheet of William Robert Schoneck for that portion of Mr. Schoneck's deposition entered into the record as part of Staff's Composite Exhibit No. 4 at the final hearing in the above-referenced docket.

Sincerely,

Kenneth A. Hoffman

KAH/rl

cc: R. Wade Litchfield, Esq.  
Ms. Renae Deaton

FPL\harris.3281tr





Florida Power & Light Company  
Docket No. 030084-EI  
Deposition of William Robert Schoneck  
Staff Late Filed Deposition Exhibit No. 1  
Page 1 of 2

## Southwest Florida Area Transmission Projects

### Completed Projects

(1/1997 - 12/2002)

	From (MVA)	To (MVA)	Miles	In-Service Date	New Lines	Capacitor Banks	Ampacity Upgrades	Cost (\$2003) <sup>1</sup>
Ft. Myers TP-Ft. Myers Sub. 138kV	129	287	-	2/97			X	\$ 58,901
Alico-Estero 138kV	241	270	-	12/97			X	\$0 <sup>2</sup>
Collier-Alligator 138kV Alternate Feed	0	253	3	12/97	X			\$ 377,615
Pine Ridge-Solana 138kV	158	179	-	12/97			X	\$0 <sup>2</sup>
Alico-Estero 138kV	270	305	-	2/99			X	\$0 <sup>2</sup>
Collier-Orange River #2 230kV	0	637	37	12/99	X			\$ 11,642,497
One 55 MVAR Cap Bank at Collier	N/A	N/A	N/A	12/99		X		\$ 647,344
Two 90 MVAR Cap Banks at Calusa	N/A	N/A	N/A	12/99		X		\$ 1,427,630
Bonita Springs-Collier 138kV	158	179	-	12/99			X	\$ 266,116
Alico-Metro 138kV	241	287	-	1/00			X	\$ 106,275
Collier-Orange River #2 230kV	637	759	-	5/00			X	\$ 236,912
One 55 MVAR Cap Bank at Collier	N/A	N/A	N/A	12/00		X		\$ 253,144
One 55 MVAR Cap Bank at Alico	N/A	N/A	N/A	12/00		X		\$ 469,262
Alico to Estero 138kV Alternate Feed	0	357	5	12/00	X			\$ 1,388,091
Buckingham-Ft. Myers 138kV	241	283	-	6/01			X	\$0 <sup>2</sup>
Collier-Naples TP 138kV Alt. Feed	0	283	3	6/01	X			\$ 1,239,556
One 15 MVAR Cap Bank at Imperial	N/A	N/A	N/A	1/02		X		\$ 282,888
Ft. Myers-Winkler 138kV	287	352	-	12/02			X	\$ 120,435

(1) Actual Costs trended to 2003\$ using Handy Whitman Index.

(2) Ampacity upgrades did not require capital expenditures.

N/A - Not Applicable - Capacitor banks provide voltage support.

## Southwest Florida Area Transmission Projects

### Proposed Future Projects

(1/2003 - 12/2007)

	From (MVA)	To (MVA)	Miles	In-Service Date	New Lines	Capacitor Banks	Ampacity Upgrades	Estimated Cost (\$2003)
Naples TP-Solana 138kV	222	251	-	12/03			X	\$ 26,000
One 15 MVAR Cap Bank at Gladiolus	N/A	N/A	N/A	6/04		X		\$ 616,000
Jetport-Orange River 230kV	637	747	-	12/04			X	\$ 242,000
Ft. Myers-Colonial 138kV	250	316	-	12/04			X	\$ 2,531,000
Colonial-Edison 138kV	222	287	-	12/04			X	\$ 1,334,000
Ft. Myers-Buckingham 138kV	283	353	-	12/04			X	\$ 572,000
Imperial-Estero TP 138kV	241	287	-	12/04			X	\$ 56,000
Orange River-Vanderbilt 230kV	514	747	-	12/04			X	\$ 381,000
Bonita Springs - Collier 138kV	179	287	-	12/04			X	\$ 2,463,000
Terry substation 230-138kV sub/autotx	*	*	*	12/04				\$ 5,644,000
Alico-Iona 138kV	241	287	-	12/05			X	\$ 21,000
Collier-Orange River #3 230kV ("Project")	0	759	TBD	12/05	X			\$23M - 41M
One 15 MVAR Cap Bank at Gladiolus	N/A	N/A	N/A	6/07		X		\$ 616,000
Naples TP-Solana 138kV	251	287	-	12/07			X	\$ 1,231,000

(\*) New transmission substation with 230/138kV transformation to provide a 230kV injection into the 138kV transmission system.

N/A - Not Applicable - Capacitor banks provide voltage support.

Florida Power & Light Company  
Docket No. 030084-EI  
Deposition of William Robert Schoneck  
Staff Late Filed Deposition Exhibit No. 1  
Page 1 of 2

## Differential of the (All FPL Plan) - (All FPL Plan with 2 CTs)

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
Year	Annual Discount Factor at 0.085	Generation Capital (Millions)	Generation Fixed O&M (Millions)	Generation Variable O&M (Millions)	Transmission Integration (Millions)	System Net Fuel (Millions)	Total Annual Costs (Millions)	NPV Total Annual Cost (Millions)	NPV Cumulative Total Costs (Millions)
2001	1	0	0	0	0	0	0	0	0
2002	0.922	0	0	0	0	0	0	0	0
2003	0.849	0	0	0	0	0	0	0	0
2004	0.783	0	0	0	0	0	0	0	0
2005	0.722	0	0	0	0	0	0	0	0
2006	0.665	(17)	(4)	0	0	0	(21)	(14)	(14)
2007	0.613	(16)	(5)	0	0	0	(21)	(13)	(27)
2008	0.565	(34)	(9)	0	0	0	(43)	(24)	(51)
2009	0.521	97	60	0	0	(58)	99	52	0
2010	0.480	(38)	(9)	0	0	0	(47)	(23)	(22)
2011	0.442	96	61	0	0	(52)	105	47	24
2012	0.408	(43)	(10)	0	0	0	(53)	(22)	3
2013	0.376	(42)	(11)	0	0	1	(52)	(20)	(17)
2014	0.346	(40)	(11)	0	0	0	(51)	(18)	(35)
2015	0.319	(38)	(11)	0	0	0	(49)	(16)	(50)
2016	0.294	109	65	1	0	(54)	121	36	(15)
2017	0.271	(43)	(13)	0	0	0	(56)	(15)	(30)
2018	0.250	108	67	0	0	(49)	126	32	2
2019	0.230	(49)	(14)	0	0	1	(62)	(14)	(13)
2020	0.212	(47)	(15)	0	0	1	(61)	(13)	(26)
2021	0.196	(45)	(15)	0	0	1	(59)	(12)	(37)
2022	0.180	(43)	(15)	0	0	2	(56)	(10)	(47)
2023	0.166	(41)	(16)	0	0	2	(55)	(9)	(56)
2024	0.153	(39)	(17)	0	0	2	(54)	(8)	(65)
2025	0.141	(38)	(17)	0	0	1	(54)	(8)	(72)
2026	0.130	(36)	(18)	0	0	2	(52)	(7)	(79)
2027	0.120	(35)	(19)	0	0	2	(52)	(6)	(86)
2028	0.111	(33)	(19)	0	0	2	(50)	(6)	(91)
2029	0.102	(32)	(21)	0	0	2	(51)	(5)	(96)
2030	0.094	(30)	(21)	0	0	3	(48)	(5)	(101)

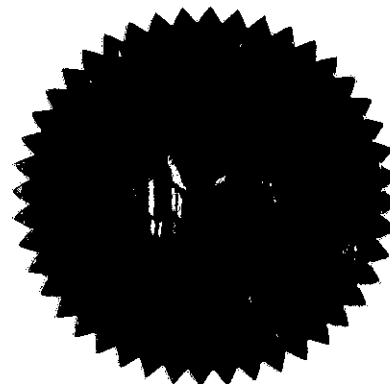
BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030084-EI

In the Matter of

PETITION FOR DETERMINATION OF  
NEED FOR COLLIER-ORANGE RIVER  
230 kV TRANSMISSION LINE IN  
COLLIER, HENDRY, AND LEE COUNTIES,  
BY FLORIDA POWER & LIGHT COMPANY.

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A CONVENIENCE COPY ONLY AND ARE NOT  
THE OFFICIAL TRANSCRIPT OF THE HEARING.  
THE .PDF VERSION INCLUDES PREFILED TESTIMONY.

DEPOSITION OF: C. Martin Mennes

TAKEN AT THE  
INSTANCE OF: The Staff of the Florida  
Public Service Commission

PLACE: Gerald L. Gunter Building  
2540 Shumard Oak Boulevard  
Room 362  
Tallahassee, Florida 32399-0850

TIME: Commenced at 2:00 p.m.  
Concluded at 3:30 p.m.

DATE: Monday, April 7, 2003

REPORTED BY: JANE FAUROT, RPR  
Chief, Office of Hearing Reporter  
FPSC Division of Commission Clerk  
Administrative Services  
(850) 413-6732

## 1 APPEARANCES:

2 R. WADE LITCHFIELD, ESQUIRE, 700 Universe  
3 Boulevard, Juno Beach, Florida 33408-0420, appearing on behalf  
4 of Florida Power & Light Company.

5 SCHEFFEL WRIGHT, ESQUIRE, Landers Law Firm, P. O.  
6 Box 271, Tallahassee, Florida 32302, appearing on behalf of  
7 Barron Collier Companies.

8 LARRY D. HARRIS, ESQUIRE, and COCHRAN KEATING,  
9 ESQUIRE, FPSC General Counsel's Office, 2540 Shumard Oak  
10 Boulevard, Tallahassee, Florida 32399-0850, appearing on behalf  
11 of the Commission Staff.

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WITNESS

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NAME:

PAGE NO.

C. MARTIN MENNES

Direct Examination by Mr. Harris

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Cross Examination by Mr. Wright

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S T I P U L A T I O N

IT IS STIPULATED that this deposition was taken pursuant to notice in accordance with the applicable Florida Rules of Civil Procedure; that objections, except as to the form of the question, are reserved until hearing in this cause; and that reading and signing was not waived.

IT IS ALSO STIPULATED that any off-the-record conversations are with the consent of the deponent.

## P R O C E E D I N G S

MARTIN C. MENNES

1  
2  
3 appeared as a witness, and after being duly sworn, was examined  
4 and testified as follows:

## D I R E C T E X A M I N A T I O N

BY MR. HARRIS:

7 Q Could you state your name, please.

8 A Yes. My name is C. Martin Mennes.

9 Q And with whom are you employed?

10 A I am employed by Florida Power and Light Company.

11 Q And your business address?

12 A 4200 West Flagler Street, Miami, Florida, 33134.

13 Q And what is your current occupation?

14 A My current position at Florida Power and Light is  
15 Vice President of Transmission Operations and Planning.16 Q And have you previously filed both direct and  
17 rebuttal testimony in Docket 030084-EI?

18 A Yes, I have.

19 Q Do you have any changes or corrections to make to  
20 either your direct or your rebuttal testimony?

21 A No, I do not.

22 Q Okay. I just have a few questions for you. Are you  
23 familiar with ten-year site plans at all?24 A Yes. If you mean the ten-year generation site plan  
25 that is filed at the PSC, yes, I am.

1 Q Could you briefly describe your familiarity with that  
2 process?

3 A Well, sure. My familiarity is that we do have --  
4 Florida Power and Light does have a load forecast in that  
5 process. The process also goes ahead and shows where we have  
6 been, shows where we are going load wise. It will show  
7 basically what our intent to supply the future growth is. It  
8 also has in the load forecast the demand load management  
9 responses that we plan on having with our energy conservation,  
10 and it also has the transmission lines that are identified  
11 associated with the generation being constructed and built.  
12 And in the past Florida Power and Light has also had other  
13 major transmission facilities identified in that plan.

14 Q Are you responsible for any of the data or  
15 information that goes into the ten-year site plan?

16 A No, I'm not directly responsible for it, although my  
17 group does furnish the information about the transmission  
18 lines. And actually my group does furnish the actual customer  
19 demand response numbers, not the conservation numbers.

20 Q I understand from, I believe, your rebuttal testimony  
21 that this project, the Orange River to Collier Number 3 project  
22 was not included in any of Florida Power and Light's ten-year  
23 site plans until this year 2003, is that correct?

24 A That is correct.

25 Q Why wasn't this project included in any previous year

1 site plans?

2 A It was not included in the previous year site plan  
3 basically because we had not identified it at the time that we  
4 ran or we supplied the data for the ten-year plan.

5 Q Why wasn't it identified?

6 A Well, basically what we identify and the way --  
7 probably the easier way to go through that is to go through  
8 what we do in our plan. We look out for X numbers of years  
9 depending on what my technical planners are trying to  
10 accomplish, but we have a regular schedule that we follow where  
11 we bring in data from past years. Well, the most recent past  
12 year, if you would, for the load, customer growth, we get our  
13 load forecast, and then we run studies on our system to make  
14 sure -- how it responds as the plan generation is being put  
15 into the system and also as the load is growing.

16 And we select certain periods of time to run these  
17 studies. And when we ran these studies in this past year, of  
18 course, we identified this need for this new transmission line  
19 for the winter of 2005/2006 on the west coast. We had  
20 previously seen quite a bit of growth in the west coast, but we  
21 did not go ahead in any studies before this to come up with the  
22 need for the new line. We came with up other fixes and then we  
23 really ran it this time, got information from the distribution  
24 planners, got information from our people doing the load  
25 forecast. Kind of an awareness item, if you would. Gee, there

1 is a tremendous amount of growth over there, and then this is  
2 when we went ahead and identified that we needed this  
3 transmission line.

4 Q Do you know approximately what the growth is in the  
5 Naples load center?

6 A Well, it is in Exhibit A in Attachment 3. It is  
7 growing about 68 megawatts a year is what we have been using.  
8 And when we say the load center, I am assuming what is  
9 identified in the south of Orange River.

10 Q That is correct.

11 A Okay.

12 Q Given that amount of growth, do you think it is  
13 unusual that you all didn't -- FPL didn't identify a need for a  
14 new line until this past year?

15 A No, I don't think it is unusual. I think that what  
16 we did know is that we have been experiencing the growth over  
17 there. We have been putting into place various fixes, various  
18 upgrades, and some of those were given to you all. I think I  
19 am confident when we went ahead and ran our studies and looked  
20 a little bit more of the 2006 summer and what we are really  
21 doing in the 2005/2006 winter that we really identified this  
22 need for this line. We have enough lead time to go ahead and  
23 go through all of the proceedings to go ahead and get the  
24 construction and get the line in service for that winter of  
25 2005/2006.

1 Q So would I be correct in understanding you to have  
2 just said that you don't believe there is an issue with the  
3 ten-year site planning not having identified this line until  
4 this year, April of 2003, since that gave you enough lead time  
5 to be able to construct the line in time for the need for it?

6 A Yes, what you just said is correct.

7 Q Okay. Do you have any concerns that being a ten-year  
8 site plan, looking forward ten years, that perhaps these type  
9 of project should be identified any earlier than one or two  
10 years in advance of the need?

11 A No, I do not. And I think as long as we have got the  
12 appropriate four years or whatever we need, we can get the  
13 lines constructed. On the other hand, I do have a concern to  
14 the extent that where some generation may be sited may require  
15 quite a bit more extensive upgrades and a greater lead time in  
16 some areas. And as a matter of fact, we have got that type of  
17 information posted on our OASIS system to help the developers,  
18 if you would, locate transmission facilities and kind of give  
19 them an idea of where the best place to locate transmission  
20 facilities are.

21 Q Would you agree with me that there are other  
22 entities, either state, or private, or quasi-public entities  
23 that use ten-year site planning to fulfill their  
24 responsibilities?

25 A I really don't know, quite frankly.

1 Q For example, do you know whether the regional  
2 planning councils use our ten-year site plans in looking for  
3 their growth?

4 A I really don't.

5 Q Would you be concerned that while a two or three-year  
6 planning horizon might be sufficient for FPL's purposes of  
7 being able to build a line and get it on line when needed,  
8 might not be sufficient for other entities to be able to do  
9 that?

10 MR. LITCHFIELD: Let me object to the form of the  
11 question or at least ask for clarification. I'm not sure  
12 whether the witness did testify that we use a two or three-year  
13 planning horizon.

14 MR. HARRIS: Okay.

15 THE WITNESS: Yes. We really look out, you know,  
16 again through the summers and even this past year probably  
17 looked out -- and I would imagine we ran a lot of things in the  
18 2006/2007 summer, so our time frame is -- it does give us the  
19 proper lead time.

20 BY MR. HARRIS:

21 Q Is it your understanding of ten-year site plans that  
22 projects other than ones where final decisions to proceed have  
23 been made should be included in those ten-year site plans?

24 A It's hard to answer that. Could you ask it again.

25 Q In reference to your rebuttal testimony I believe on

1 Page 3, you refer to the final decision for this project wasn't  
2 made until the fall of 2002. That is the beginning pages,  
3 Lines 1 and 2, I believe, at the very top. In using the term  
4 final decision, I'm wondering if you believe that only projects  
5 where a final decision has been made should be included in a  
6 ten-year site plan?

7 A Yes, I think because if we -- again, to me the  
8 ten-year site plan is more of a generation and requirement to  
9 meet the load. When that generation is specified we need to  
10 point out exactly what transmission is going along with it, and  
11 I think it does need to be specific as opposed to something  
12 that may or may not be built, may send the right -- or, excuse  
13 me, may send the wrong signals to various developers. I think  
14 it is important to go ahead and tell people exactly what for  
15 sure we are going to do.

16 Q So, would my inference of what you just said then --  
17 I want to clarify in my mind.

18 A Sure.

19 Q What I heard you just say is basically you feel that  
20 the transmission should follow the generation and that the  
21 ten-year site plan might need to look forward for potential  
22 future generation. Then once that generation is sited more or  
23 less firmly, then the generation would follow that. Would that  
24 be correct?

25 A I think in part. What I meant to say is that the



1 ten-year site plan for me is the future growth. It lists out  
2 the generation. Once the generation is listed, it would also  
3 show the associated transmission that is going to be needed for  
4 that generation. And in the past Florida Power and Light has  
5 included kind of as an FYI item or something along those lines,  
6 other major transmission that we know for sure that we are  
7 going to build. And we have also put that into that particular  
8 document.

9 Q And so what you know for sure you are going to build  
10 would be projects where the decision has been made to seek  
11 approval for those and go forward with them?

12 A Yes, that is correct.

13 Q And you don't believe that it would be appropriate to  
14 include, quote, FYI or heads up type information for projects  
15 that you thought there might be a future need for but didn't  
16 have a firm decision at this point?

17 A Yes, that is correct.

18 MR. HARRIS: Let me have just a second. I don't have  
19 any further questions. Thank you.

20 CROSS EXAMINATION

21 BY MR. WRIGHT:

22 Q Good afternoon, Mr. Mennes. We introduced ourselves  
23 earlier and I have seen you around at the GridFlorida meetings  
24 before. My name is Schef Wright, and I am an attorney  
25 representing Barron Collier Companies in this case. Probably



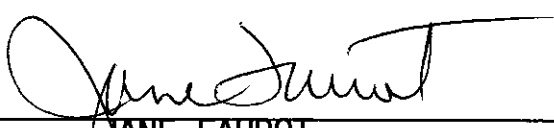
1 STATE OF FLORIDA )  
2 COUNTY OF LEON )

: CERTIFICATE OF OATH

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I, the undersigned authority, certify that C. MARTIN MENNES personally appeared before me and was duly sworn.

WITNESS my hand and official seal this 7th day of April, 2003.



JANE FAUROT  
Notary Public - State of Florida



Jane Faurot  
MY COMMISSION # DD083610 EXPIRES  
July 16, 2005  
BONDED THRU TROY FAIR INSURANCE, INC.


1 STATE OF FLORIDA )  
2 COUNTY OF LEON ) : CERTIFICATE OF REPORTER

3  
4 I, JANE FAUROT, Official FPSC Commission Reporter, do  
5 hereby certify that I was authorized to and did  
6 stenographically report the foregoing deposition at the time  
7 and place herein stated.

8 I FURTHER CERTIFY that this transcript, consisting of  
9 37 pages, constitutes a true record of the testimony given by  
10 the witness.

11 I FURTHER CERTIFY that I am not a relative, employee,  
12 attorney or counsel of any of the parties, nor am I a relative  
13 or employee of any of the parties' attorney or counsel  
14 connected with the action, nor am I financially interested in  
15 the action.

16 DATED THIS 8th day of April, 2003.

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JANE FAUROT, RPR  
Chief, Office of Hearing Reporter Services  
FPSC Division of Commission Clerk and  
Administrative Services  
(850) 413-6732

**RUTLEDGE, ECENIA, PURNELL & HOFFMAN**

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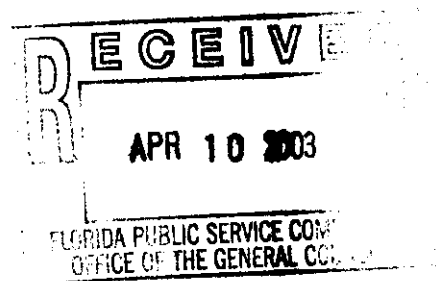
GOVERNMENTAL CONSULTANTS  
MARGARET A. MENDUNI  
M. LANE STEPHENS

April 10, 2003

**BY HAND DELIVERY**

Larry Harris, Esq.  
Division of Legal Services  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Room 370  
Tallahassee, FL 32399-0850

Re: Docket No. 030084-EI



Dear Larry:

Enclosed is the Errata Sheet of C. Martin Mennes.

Sincerely,

A handwritten signature in cursive script that reads "Kenneth A. Hoffman".

Kenneth A. Hoffman

KAH/rl

cc: R. Wade Litchfield, Esq.  
Ms. Renae Deaton

FPL\harris.410ltr



**Florida Power & Light Company  
Docket No. 030084  
Staff's First Set of Interrogatories  
Request No. 1  
Page 1 of 1**

**Q.**

Explain why the proposed Collier-Orange River #3 230 kV transmission line (Project) was not included in FPL's 2002 Ten-Year Site Plan. Include a discussion of when FPL made its initial and final decision to construct the Project.

**A.**

The Collier-Orange River #3 230kV transmission line was not included in FPL's 2002 Ten-Year Site Plan because the line was not identified as the solution to mitigate certain overloads and voltage concerns in FPL's Southwest Florida area until after FPL's Ten-Year Site Plan was submitted in April 2002. FPL has been monitoring the southwest area of Florida and has been trying to address these conditions through the utilization of the existing capability of the transmission system. Some of the ways FPL accomplishes improved utilization include switching options, ampacity upgrades, capacitor bank additions, etc. (see FPL's response to Question No. 2). These types of improvements are normally less costly than adding a major 230kV line and therefore are pursued first. During the 2002 transmission planning assessment, after considering the growing load in this area and the magnitude of the problems identified, FPL concluded in the summer of 2002 that it could no longer adequately address the growing overload and voltage concerns through the above-mentioned types of solutions and determined it to be necessary to add a new 230kV line from the Orange River Substation to the Collier Substation to address these concerns (as discussed in section IV part A.1 of Exhibit "A"). FPL made its final decision to construct the line in the fall of 2002. FPL plans to include the line in its 2003 Ten-Year Site Plan.

Q. Please provide a listing of all transmission projects completed in the Southwest Florida area within the past five years. For each of these completed projects, provide the net present value cost in 2003 dollars.

A.

**Southwest Florida Area Transmission Projects**

**Completed Projects  
(1/1997 - 12/2002)**

	From (MVA)	To (MVA)	Miles	In-Service Date	New Lines	Capacitor Banks	Ampacity Upgrades	Cost (\$2003) <sup>1</sup>
Ft. Myers TP-Ft. Myers Sub. 138kV	129	287		2/97			X	\$ 58,001
Alco-Estero 138kV	241	270		12/97			X	\$0 <sup>2</sup>
Collier-Alligator 138kV Alternate Feed			3	12/97	X			\$ 377,815
Pine Ridge-Solana 138kV	158	179		12/97			X	\$0 <sup>2</sup>
Alco-Estero 138kV	270	305		2/99			X	\$0 <sup>2</sup>
Collier-Orange River #2 230kV			37	12/99	X			\$ 11,642,497
One 55 MVAR Cap Bank at Collier				12/99		X		\$ 647,344
Two 90 MVAR Cap Banks at Calusa				12/99		X		\$ 1,427,630
Bonita Springs-Collier 138kV	158	179		12/99			X	\$ 286,116
Alco-Metro 138kV	241	287		7/00			X	\$ 106,275
Collier-Orange River #2 230kV	637	759		6/00			X	\$ 236,912
One 55 MVAR Cap Bank at Collier				12/00		X		\$ 253,144
One 55 MVAR Cap Bank at Alco				12/00		X		\$ 469,282
Alco to Estero 138kV Alternate Feed			5	12/00	X			\$ 1,388,091
Buckingham-Ft. Myers 138kV	241	283		6/01			X	\$0 <sup>2</sup>
Collier-Naples TP 138kV Alt. Feed			3	6/01	X			\$ 1,239,556
One 15 MVAR Cap Bank at Imperial				7/02		X		\$ 282,888
Ft. Myers-Winkler 138kV	287	352		12/02			X	\$ 120,435

(1) Actual Costs trended to 2003\$ using Handy Whitman Index.  
(2) Ampacity upgrades did not require capital expenditures.



Q. Please provide a listing of all transmission projects proposed in the Southwest Florida area over the next five years. For each of these proposed projects, provide the net present value cost in 2003 dollars.

A.

**Southwest Florida Area Transmission Projects  
Proposed Future Projects  
(1/2003 - 12/2007)**

	From (MVA)	To (MVA)	Miles	In-Service Date	New Lines	Capacitor Banks	Ampacity Upgrades	Estimated Cost (\$2003)
Naples TP-Solana 138kV	222	251		12/03			X	\$ 26,000
One 15 MVAR Cap Bank at Gladiolus				6/04		X		\$ 618,000
Jetport-Orange River 230kV	637	747		12/04			X	\$ 242,000
Ft. Myers-Colonial 138kV	250	316		12/04			X	\$ 2,531,000
Colonial-Edison 138kV	222	287		12/04			X	\$ 1,334,000
Ft. Myers-Buckingham 138kV	283	353		12/04			X	\$ 572,000
Imperial-Estero TP 138kV	241	287		12/04			X	\$ 56,000
Orange River-Vanderbilt 230kV	514	747		12/04			X	\$ 381,000
Bonita Springs - Collier 138kV	179	287		12/04			X	\$ 2,463,000
Terry substation 230-138kV sub/autotx				12/04				\$ 5,644,000
Alico-Iona 138kV	241	287		12/05			X	\$ 21,000
Collier-Orange River #3 230kV ("Project")			TBD	12/05	X			\$23M - 41M
One 15 MVAR Cap Bank at Gladiolus				6/07		X		\$ 618,000
Naples TP-Solana 138kV	251	287		12/07			X	\$ 1,231,000

**Florida Power & Light Company  
Docket No. 030084  
Staff's First Set of Interrogatories  
Request No. 4  
Page 1 of 1**

**Q.**

Regarding the list of transmission projects identified in Interrogatories #2 and #3 above, list the completed and proposed projects which would no longer be essential to ensure transmission system stability if the proposed Collier-Orange River Project were completed and in service.

**A.**

Even if the proposed Collier-Orange River Project were completed and in service, all of the transmission projects identified in Interrogatories #2 and #3 would still be needed in order to (1) mitigate other overloads and voltage concerns that are not addressed by the proposed Collier-Orange River Project and (2) continue to provide safe and reliable power to the residents of the growing Project Service Area.

**Q.**

Page 12 of the Direct Testimony of FPL witness Schoneck contains a discussion of how the proposed Project will mitigate low voltage conditions in the Southwest Florida area. Discuss whether options such as new generation in Collier County or a new transmission line between Collier County and the Florida east coast would mitigate low voltage conditions in the region. Describe how long the proposed Project, as well as each of these two alternatives, would mitigate low voltage conditions before another transmission project would be necessary.

**A.**

An option such as new generation near the Naples load center was considered as Alternative V that would mitigate single contingency overloads and low voltages in the Project Service Area as discussed on pages 24 and 25 of Exhibit "A" of the Petition and on page 20 of witness Schoneck's direct testimony. Siting of new generation near the Naples load center (e.g., FPL's Collier Substation) would reduce the amount of power flow into the area necessary to maintain adequate voltage levels. However, siting new generation (2 combustion turbines) near the Naples load center was found to be uneconomic (\$101M NPV) relative to the Project.

An option to build a new transmission line between Collier County and the Florida east coast was not considered. A study to determine the specific configuration and the effectiveness of this type of option has not been conducted. However, even if a new transmission line from the east coast of Florida would mitigate low voltages and overloads on existing transmission lines, the fact remains that a major transmission line extending from the east coast of Florida to Collier (90 – 110 miles) would greatly exceed the cost of Alternative II. As discussed in detail on pages 22 and 23 of Exhibit "A" of the Petition, Alternative II has a cost of \$138Million (PVRR). Therefore, this option would not have been cost effective and was not considered.

The proposed Project and new generation in the Naples load center, based on current planning assumptions, could be expected to mitigate the low voltage conditions for the next 8 to 10 years based on the forecasted load growth in the Project Service Area.

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**Q.**

Regarding the five listed alternatives to the proposed Project, contained on pages 17-20 of the Direct Testimony of FPL witness Schoneck, discuss why FPL did not consider the construction of a new transmission line between Collier County and the Florida east coast. If FPL did consider such an alternative, provide an estimate of the net present value cost in 2003 dollars. Also, explain why such an alternative was not discussed in FPL's petition or direct testimony.

**A.**

FPL did not consider the alternative of constructing a new transmission line between Collier County and the Florida east coast because it would have been too costly as discussed in the answer to Question No. 5 above.

**AFFIDAVIT**

State of Florida

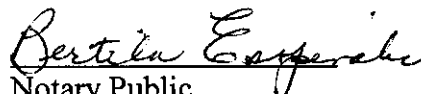
County of Dade

Before me, the undersigned authority, personally appeared William Robert Schoneck, who first being duly sworn, deposes and states:

My name is William Robert Schoneck. I am employed by Florida Power & Light Company (FPL) as the Manager of Transmission Planning, Power Systems. I am sponsoring FPL's responses to Interrogatory Nos. 1, 4, 5 and 6 and co-sponsoring FPL's responses to Interrogatory Nos. 2 and 3 to Staff's 1<sup>st</sup> Set of Interrogatories to Florida Power & Light Company in Docket No. 030084-EI. The interrogatory responses are true and correct to the best of my knowledge and belief.



The forgoing affidavit was acknowledged before me this 13<sup>th</sup> day of March, 2003 by William Robert Schoneck, who is personally known to me.

  
Notary Public  
State of Florida  
Commission or Serial No.  
My Commission Expires:




**AFFIDAVIT**

State of Florida

County of Palm Beach

Before me, the undersigned authority, personally appeared Dean Busch, who first being duly sworn, deposes and states:

My name is Dean Busch. I am employed by Florida Power & Light Company (FPL) as Transmission Project Manager. I am co-sponsoring FPL's responses to Interrogatory Nos. 2 and 3 to Staff's 1<sup>st</sup> Set of Interrogatories to Florida Power & Light Company in Docket No. 030084-EI. The interrogatory responses are true and correct to the best of my knowledge and belief.

 3/14/2003

The forgoing affidavit was acknowledged before me this 14<sup>th</sup> day of March, 2003 by Dean Busch, who is personally known to me.



Notary Public

State of Florida

Commission or Serial No. DD173233

My Commission Expires: 12/22/2006



Dianna Sullivan  
Commission # DD173233  
Expires Dec. 22, 2006  
Bonded Thru  
Atlantic Bonding Co., Inc.