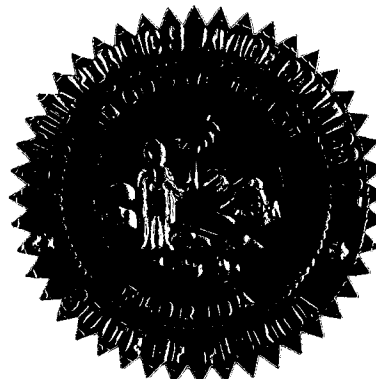


BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 060424-EI

In the Matter of:

PETITION FOR DETERMINATION OF NEED
FOR BOBWHITE-MANATEE 230 KV
TRANSMISSION LINE IN MANATEE AND
SARASOTA COUNTIES, BY FLORIDA POWER
& LIGHT COMPANY.



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PROCEEDINGS: HEARING

BEFORE: COMMISSIONER ISILIO ARRIAGA
COMMISSIONER MATTHEW M. CARTER, II
COMMISSIONER KATRINA J. TEW

DATE: Tuesday, August 8, 2006

TIME: Commenced at 9:35 a.m.
Concluded at 9:50 a.m.

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

REPORTED BY: LINDA BOLES, RPR, CRR
Official Commission Reporter
(850) 413-6734

DOCUMENT NUMBER-DATE

FLORIDA PUBLIC SERVICE COMMISSION

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FPSC-COMMISSION CLERK

1 PARTICIPATING:

2 KENNETH A. HOFFMAN, ESQUIRE, Rutledge, Ecenia,
3 Purnell & Hoffman, P.A., Post Office Box 551, Tallahassee,
4 Florida 32302, appearing on behalf of Florida Power & Light
5 Company.

6 GARSON R. KNAPP, ESQUIRE, Florida Power & Light
7 Company, 700 Universe Boulevard, Juno Beach, Florida
8 33408-0420, appearing on behalf of Florida Power & Light
9 Company.

10 MARTHA CARTER BROWN, ESQUIRE, FPSC General Counsel's
11 Office, 2540 Shumard Oak Boulevard, Tallahassee, Florida
12 32399-0850, appearing on behalf of the Florida Public Service
13 Commission Staff.

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I N D E X

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NAME:

PAGE NO.

VICENTE ORDAX, JR.

Prefiled (Redacted) Direct Testimony Inserted

14

CERTIFICATE OF REPORTER

33

EXHIBITS

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NUMBER:		ID.	ADMTD.
1	Comprehensive Exhibit List	13	13
2	Composite Stip-2	13	13
3	(Redacted) FPL-1	13	13
4	(Confidential) FPL-2	13	13

P R O C E E D I N G S

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COMMISSIONER ARRIAGA: Call the hearing to order.

Good morning everyone.

MS. BROWN: Good morning.

COMMISSIONER ARRIAGA: Ms. Brown, would you read the notice please.

MS. BROWN: By notice issued June 14th, 2006, this time and place was set for a hearing in Docket Number 060424-EI, In Re: Petition for Determination of Need for Bobwhite-Manatee 230kV Transmission Line in Manatee and Sarasota Counties by Florida Power & Light Company. The purpose of the hearing is set out in the notice.

COMMISSIONER ARRIAGA: Thank you. We'll now take appearances.

MR. HOFFMAN: Thank you, Commissioner. Good morning, Commissioners. My name is Kenneth Hoffman. I'm with the firm of Rutledge, Ecenia, Purnell and Hoffman, Post Office Box 551, Tallahassee, Florida 32302.

I would also like to enter an appearance for Garson Knapp, 700 Universe Boulevard, with Florida Power & Light Company, Juno Beach, Florida 33408. Mr. Knapp and I are appearing in this proceeding on behalf of the Petitioner, Florida Power & Light Company.

MS. BROWN: And Martha Carter Brown on behalf of the Commission.

1 COMMISSIONER ARRIAGA: Thank you. Ms. Brown, are
2 there any preliminary matters?

3 MS. BROWN: FP&L is prepared to give a brief opening
4 statement to present an overview of their proposed project.
5 Beyond that, I'm not aware of any preliminary matters.

6 COMMISSIONER ARRIAGA: Thank you. Are you prepared
7 to, Mr. Hoffman, to do an opening statement?

8 MR. HOFFMAN: Yes, sir.

9 COMMISSIONER ARRIAGA: Please proceed.

10 MR. HOFFMAN: Thank you, Commissioners. Florida
11 Power & Light Company has filed a petition requesting this
12 Commission to determine the need for a new 230kV transmission
13 line which will originate from FPL's existing Manatee
14 Substation, which is in Manatee County, and run south and
15 terminate at a proposed substation, at an anticipated
16 substation which we call the Bobwhite Substation that will be
17 located in Sarasota County. So logically we call this our
18 Bobwhite-Manatee Project.

19 Now it's no secret, of course, that the State of
20 Florida continues to experience robust population growth. The
21 Southwest Florida area, which is part of Florida Power & Light
22 Company's west region, continues to be one of the rapidly
23 growing regions in the state. And that, of course, requires
24 FPL to continue to investigate and assess the need for new
25 electric facilities to meet that growth in a reliable manner.

1 FPL's transmission assessment studies which were
2 conducted earlier this year in 2006 have identified regional
3 transmission system limitations in Manatee and Sarasota
4 Counties that must be addressed by 2011 to ensure sufficient
5 capacity to provide reliable service to the existing and
6 anticipated substations and the populations that these
7 substations will serve in the Manatee County and Sarasota
8 County areas. So FPL has filed this petition with the intent
9 and with the goal of securing approval for the construction of
10 the Bobwhite-Manatee Project and having the line in service by
11 December of 2011 so that FPL will be able to meet and overcome
12 the transmission system limitations that we foresee in our
13 studies and so that FPL will be able to continue to provide
14 reliable service in the most cost-effective manner in the
15 Manatee and Sarasota County areas.

16 As part of this process, FPL has conducted a
17 comprehensive analysis of potential alternatives to the
18 Bobwhite-Manatee Project, and the company has concluded that
19 the project is the most cost-effective, reliable and efficient
20 alternative to accomplish three critical goals for our
21 customers.

22 First, the project will provide additional
23 reinforcement, transmission reinforcement to the already
24 existing 230kV transmission network that currently runs between
25 the Manatee Substation in Manatee County and the Ringling

1 Substation in Sarasota County.

2 Secondly, the project will allow FPL to serve the
3 increasing load and customer base in the area that is south of
4 the Manatee Substation, north of our anticipated Bobwhite
5 Substation, and east of this existing 230kV transmission
6 network in the most cost-effective and reliable manner.

7 And finally, the project will provide another
8 electrical feed from the Manatee Substation in Manatee County
9 down into Sarasota County through a separate right-of-way off
10 of the existing right-of-way. And that's critical because the
11 construction of a significant new transmission line such as
12 this one in a new right-of-way will improve reliability because
13 it will reduce the impact of the potential loss of existing
14 transmission facilities on the existing common right-of-way
15 that may occur as a result of a catastrophic event, whether
16 that be a hurricane, a terrorist attack, an airplane crash,
17 whatever that may be.

18 The bottom line is that the project is the most
19 cost-effective and reliable alternative to meet FPL's
20 anticipated area load requirements by serving proposed future
21 distribution substations and population groups that are and
22 will be located east of I-75 and east of this existing 230kV
23 transmission network that I have previously talked about, while
24 at the same time maximizing system reliability and minimizing
25 costs for our customers.

1 Now as we've talked about in our petition and as
2 we've demonstrated through the testimony of Mr. Ordax and the
3 exhibits, the cost and reliability benefits of this project
4 would be enhanced by the construction of the project in a
5 geographically separate right-of-way as stipulated by staff.

6 Commissioners, there are no intervenors in this
7 proceeding. FPL and the staff have reached stipulations on the
8 five issues in the case. I'll wrap up by asking the Commission
9 on behalf of Florida Power & Light Company to approve those
10 stipulations on those five issues and thereby grant Florida
11 Power & Light Company's petition to determine the need for the
12 Bobwhite-Manatee 230 kV Project. Thank you.

13 COMMISSIONER ARRIAGA: Thank you, Mr. Hoffman.

14 Commissioners, any questions or discussion? None?
15 Okay. No questions or discussion.

16 May I ask one question, please?

17 MR. HOFFMAN: Yes, sir.

18 COMMISSIONER ARRIAGA: And this is not -- I
19 understand this is not part of our jurisdictional proceeding
20 and it's nothing that -- it's just that I'm intrigued, and it's
21 referring to the Siting Act. I just mentioned before to you as
22 we were talking that we were in San Francisco in the NARUC
23 convention, and one of the things that we heard or I heard
24 apparently was we need more transmission all over the United
25 States -- not only in Florida, it's all over the United States,

1 we need more transmission.

2 You're going to be facing after -- if we do approve
3 what you're requesting, you'll be facing a siting issue. And
4 you know that nobody wants the electric poles and the towers
5 behind their back yards. So what do you think FPL will
6 encounter in the siting process? Will this be something that
7 you can -- how are you planning to face the issue of local
8 communities and counties regarding the siting of the
9 transmission line?

10 MR. HOFFMAN: Commissioner Arriaga, the way that the
11 process works, the Legislature has essentially established
12 under Chapter 403 what I would describe as a, sort of a
13 one-stop centralized certification process. Now to this point
14 there are, there is nothing that has been filed in the docket
15 before the Commission expressing the type of complaint or
16 concern that you've described. But that does not mean that
17 that may not arise once we get into the site certification
18 process.

19 The way that it works essentially, and I don't want
20 to get too far into all the details, but a snapshot of the
21 process is that under the Florida Electric Transmission Line
22 Siting Act, FPL must first come to this Commission and secure a
23 determination of need before filing an application for site
24 certification. And that would be an application for site
25 certification of a specific proposed corridor for the

1 Bobwhite-Manatee line. Now we anticipate that filing to occur
2 the first of December of this year.

3 Now the specific corridor or route for the
4 Bobwhite-Manatee line is determined through this process, and
5 that process calls for the hearing before an Administrative Law
6 Judge, who will then issue a recommended order for approval to
7 the Governor and Cabinet sitting as the siting board.

8 Assuming that the company gets that approval, that
9 approval provides the applicant, in this case FPL, with a
10 license for the proposed corridor, which would be the subject
11 of the application. That process allows for and addresses
12 input from any and all affected parties, including various
13 state agencies, and, under the statute we're talking about,
14 participation, required participation not only by this
15 Commission and DEP, but the Department of Community Affairs,
16 the Fish and Wildlife Conservation Commission, DOT, affected
17 water management districts, affected local governments and
18 affected people. There are informational hearings held sort of
19 like the customer hearings that we hold before the Public
20 Service Commission. So all affected parties, I would say, are
21 given an opportunity to participate. Alternative corridors can
22 be proposed, evidence is presented, and ultimately it's up to
23 the Administrative Law Judge to issue a recommended order for
24 final approval to the siting board.

25 So if and when through this process there are issues

1 raised, there are concerns raised, whether you're talking about
2 through the informational meetings that are held at the local
3 level or through the formal hearing process before the
4 Administrative Law Judge, FPL will then have to address those
5 and make its case for approval of the specific corridor once
6 that is ultimately proposed and filed as part of the site
7 certification application.

8 COMMISSIONER ARRIAGA: And how long does that process
9 take, do you anticipate it will take?

10 MR. HOFFMAN: I think it can depend on whether or not
11 there are specific alternative corridors that are proposed as
12 part of the site certification process. But I would anticipate
13 that, from FPL's perspective that we would expect the hearing
14 process and the issuance of a recommended order to occur at
15 some point in the latter part of 2007. And hopefully if the
16 company gains approval, that approval will then be timely
17 because we set this thing out to get the site certification
18 filed and with the anticipation of approval that will allow for
19 construction and completion, securing the necessary
20 right-of-ways to allow us to have this line in place consistent
21 with our representation to you by December of 2011 to allow us
22 to meet the contingencies and potential limitations that we see
23 with the system through our studies and our need to have this
24 line in place to continue the provision of reliable service to
25 that expanding population growth in those two counties.

1 COMMISSIONER ARRIAGA: Thank you.

2 Commissioners, anymore questions? None? Thank you
3 so much.

4 MR. HOFFMAN: Thank you, Commissioner.

5 COMMISSIONER ARRIAGA: Any prefiled testimony?

6 MS. BROWN: Yes, Commissioner. We're prepared to
7 establish the record in the case now. And as Mr. Hoffman said,
8 the issues are all stipulated. So we would ask that the
9 prefiled testimony of Mr. Ordax be inserted into the record as
10 though read. Everyone has waived the right to
11 cross-examination.

12 COMMISSIONER ARRIAGA: With no objection, show the
13 prefiled testimony inserted into the record as though read.

14 MS. BROWN: Also, all the exhibits are stipulated.
15 We would like to mark and move the Comprehensive Stipulated
16 Exhibit List which I handed out to you all into the record.
17 The list itself is Exhibit 1. And all the other exhibits on
18 the list should be numbered as indicated there and moved into
19 the record.

20 COMMISSIONER ARRIAGA: Show exhibits marked as
21 indicated in the comprehensive exhibit list and moved into the
22 record.

23 (Exhibits 1 through 4 marked for identification and
24 admitted into the record.)

25

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF**

4 **VICENTE ORDAX, JR.**

5 **DOCKET NO. 060424-EI**

6 **JUNE 26, 2006**

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 Street,
10 Miami, FL 33134.

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

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

14 **Q. Please describe your duties and responsibilities in that position.**

15 A. My responsibilities include the direct supervision of electrical engineers in the
16 development and evaluation of transmission expansion plans utilizing load flow
17 analyses. I have held this position and performed these responsibilities since
18 September of 2001.

19 **Q. Please describe your professional work experience and educational
20 background prior to your present position.**

21 A. Prior to my present position, I worked as a transmission planning engineer at FPL
22 from 1993 through August 2001 in the area of Bulk Transmission Planning.
23 During this time my primary duties and responsibilities included participation in,

1 and performance of, FPL bulk transmission studies, joint transmission studies
2 with neighboring utilities, the evaluation of the transmission requirements of
3 alternative future power plant proposals, and stability analysis related to the
4 interconnection of Independent Power Producers. In addition, I was responsible
5 for performing part of the transmission assessments assigned to the Transmission
6 Working Group of the Florida Reliability Coordinating Council (FRCC).

7
8 From 1986 through 1993 I worked in FPL's Protection and Control group as a
9 field engineer primarily responsible for installing, calibrating and maintaining
10 protective relays. I also worked in FPL's Operations Engineering group. My
11 primary responsibilities in the Operations Engineering group included issuing
12 transformer tap settings, optimizing generator step-up and auxiliary transformer
13 tap settings as well as performing many day to day transmission studies related to
14 transmission clearances and detailed local area transmission assessment studies
15 that would aid the Transmission System Operator.

16
17 I graduated with honors from the University of Florida with a Bachelor of Science
18 degree in Electrical Engineering in August of 1986. I received a Master of
19 Science degree in Electrical Engineering from Florida International University in
20 August of 1990. I am a registered professional engineer in the state of Florida
21 since 1991. I have also attended seminars and short courses covering topics
22 related to transmission planning.

23 **Q. Are you a member of any professional organizations?**

1 A. Yes, I am a member of the Institute of Electrical and Electronics Engineers and of
2 the Power Engineering Society.

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

4 A. Yes. I am sponsoring Exhibit "A" to FPL's Petition for Determination of Need
5 for the Bobwhite-Manatee Project (BMP or Project) filed with this Commission
6 concurrently with my testimony.

7 **Q. Was this exhibit prepared by you or under your direction and supervision?**

8 A. Yes.

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

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

- 13 1. A general description of the existing load and electric characteristics of
14 FPL's electrical transmission grid;
- 15 2. A general description of the Project including the design and operating
16 voltage of the proposed transmission line, the starting and ending points of
17 the line, the approximate cost of the Project and the projected in service
18 date;
- 19 3. The specific conditions, contingencies and factors which demonstrate the
20 need for the Project including a discussion of FPL's transmission planning
21 process and the reliability benefits of the Project;
- 22 4. The major alternatives to the Project that were evaluated and rejected by
23 FPL in favor of the Project; and

1 5. The adverse consequences to FPL's electric system and customers if the
2 Project is delayed or denied.

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

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

13

14

OVERVIEW OF FPL

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

16 A. FPL provides electric service to more than 4.4 million customers in 35 Florida
17 counties. In approximate terms, FPL's service territory includes most of the east
18 coast of Florida beginning in Miami-Dade County in southeast Florida and
19 running north to Nassau County in northeast Florida, as well as a large portion of
20 southwest Florida beginning in Collier County and running north through
21 Manatee County.

22 **Q. Please provide a general description of the existing load and electric**
23 **characteristics of FPL's electrical transmission grid.**

1 A. FPL's existing load characteristics consist primarily of residential load with
2 limited commercial and industrial load. A listing of historic and forecasted FPL
3 peak demand is provided in Attachment 2 of Exhibit "A". FPL's summer peak
4 demand in 2005 was 22,361MW and the winter peak demand in 2005/06 was
5 19,683MW serving approximately 4.4 million customers (January 2006). An
6 overview of FPL's existing electrical transmission network indicating the general
7 location of generating plants, substations, and transmission lines is shown in
8 Attachment 1 of Exhibit "A".
9

10 DESCRIPTION OF THE PROJECT

11 **Q. Describe the proposed BMP.**

12 A. As shown in Attachment 4 of Exhibit "A", the BMP consists of a new 230kV
13 transmission line that will provide an additional 230kV parallel, but
14 geographically separate, path from the existing 230kV transmission lines in
15 Manatee and Sarasota Counties to relieve the existing transmission network. The
16 Project also will provide electric service to three planned FPL distribution
17 substations and one Peace River Electric Cooperative (PRECO) distribution
18 substation located south of the existing Manatee Substation, north of the planned
19 Bobwhite Substation and to the east of the existing transmission common Right-
20 of-Way (ROW). This is the Project Service Area. The proposed in-service date
21 for the BMP is December 2011.

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

1 A. The proposed transmission line will connect FPL's Manatee and proposed
2 Bobwhite Substations. The line will be constructed with a single concrete pole
3 design and will have a design and operating voltage of 230kV. The electrical map
4 included as Attachment 4 of Exhibit "A" shows the electrical facilities in the
5 Project Service Area that currently exist as well as other planned facilities in the
6 general area (in black) and a conceptual electrical connection for the BMP (in
7 red). The locations on the map of facilities not yet in service are approximate. In
8 particular, the line depicting the BMP is intended to indicate conceptually an
9 electrical connection from the Manatee Substation to the proposed Bobwhite
10 Substation strictly from an engineering and planning perspective. The final length
11 and routing of the line will be determined in certification proceedings under the
12 Transmission Line Siting Act (TLSA).

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

15 A. FPL presently is evaluating corridors in anticipation of submitting an application
16 to the Florida Department of Environmental Protection under the TLSA in the
17 winter of 2006. A final decision by the Siting Board is expected in the summer of
18 2007. Detailed design of the BMP will begin as soon as a final corridor is
19 approved. Construction is expected to begin in mid 2010 and expected to be
20 completed by December 2011.

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

22 A. The final route has not been selected and final costs will be subject to a number of
23 factors including the determination of the final length and route of the line as

1 determined under the TLSA. Specifically, the length and route of the line, and
2 other conditions that could be imposed through the TLSA process, will affect land
3 acquisition costs, line construction costs, environmental permitting and mitigation
4 costs, ROW preparation costs, and other compliance costs. Subject to these types
5 of cost variances that could arise through the TLSA process, the estimated capital
6 cost of the BMP is \$46.9 million. The corresponding present value revenue
7 requirement is \$14.9 million.

9 FPL'S PLANNING PROCESS

10 **Q. How does FPL determine the need for new transmission lines?**

11 A. Planning for the FPL transmission system follows practices and criteria that are
12 consistent with the North American Electric Reliability Council (NERC) and
13 Florida Reliability Coordinating Council (FRCC) and other applicable standards.
14 The NERC Reliability Standards, which have been adopted by the FRCC, specify
15 transmission system operating scenarios that should be evaluated, and the
16 attendant levels of system performance that should be attained. The NERC
17 Reliability Standards are provided in Attachment 5 of Exhibit "A".

18
19 FPL's transmission planning process is explained in Attachment 6 of Exhibit "A".
20 FPL conducts an annual transmission assessment of the effects of forecasted
21 future load growth on the transmission system, the need to serve new load areas
22 or large new customers, future interconnections with neighboring utilities,
23 integration of new generation facilities and firm contractual transmission service

1 obligations. The changes in system performance due to these factors is simulated
2 and analyzed for the present and in future years to identify existing and future
3 system limitations. Alternative solutions to these limitations are then developed,
4 analyzed, and screened on the basis of their electrical performance. Viable
5 alternatives are compared for their relative merits with respect to economics,
6 reliability, feasibility, compatibility with long range area requirements, and
7 operating flexibility. Transmission facility additions such as a new transmission
8 line are implemented as a result of this process when they provide the best overall
9 solution.

10 **Q. What studies did FPL perform to determine the need for the BMP?**

11 A. In developing the need for the BMP, FPL conducted regional transmission
12 assessment studies as described in Attachment 6 of Exhibit "A". These studies
13 showed transmission limitations on the existing 230kV transmission network
14 south of Manatee Substation and north of Ringling Substation due to projected
15 load growth in the 2011/2012 time frame.

16
17 **NEED FOR THE PROJECT**

18
19 **Q. Explain the need for the BMP.**

20 A. The need for the Project is based on the following considerations:

- 21 1. The need to provide additional transmission reinforcement to the existing
22 230kV transmission line between Manatee and Ringling Substations in a
23 reliable manner consistent with NERC, FRCC, and other applicable
24 standards.

1 2. The need to efficiently and effectively integrate and serve new distribution
2 substations that are needed to serve the projected load growth in the Project
3 Service Area.

4

5 3. The need for another electrical feed from the Manatee Plant south to the
6 Ringling area via a separate ROW path, thereby reducing the impact of a loss
7 of the existing transmission facilities on a common ROW.

8

9 **Q. Please explain the benefits of this Project.**

10 A. The Project will provide FPL with the best overall choice of facilities necessary to
11 maintain reliability in the existing and future areas of customer load in the Project
12 Service Area. Specifically, the Project will allow FPL to:

13 1. Maintain area reliability by providing a parallel but geographically separate
14 path to the existing Manatee – Ringling 230kV transmission network, which
15 contains three 230kV transmission lines within a common ROW.

16 2. Serve new customer load along the I-75 corridor and east of the existing
17 230kV transmission network from the northern portion of Manatee County
18 to the northern portion of Sarasota County.

19 3. Reduce transmission losses by approximately 8 MW.

20 4. Meet the Project Service Area's long term growth requirements for at least
21 the next 10 years, based on the regional load forecast.

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

1 A. As outlined in Exhibit "A" of the Petition, FPL analyzed load flows for the
2 2011/2012 winter peak load without any new transmission facilities in service.
3 As referenced in Attachment 9 of Exhibit "A," these analyses indicate that for 11
4 different single contingency events, a variety of overloads ranging from 101% to
5 110% of thermal MVA facility rating and low voltages to as low as 0.94 per unit
6 (pu) can be experienced within and near the Project Service Area. The NERC
7 Reliability Standards require that the facility ratings not exceed 100% of the
8 applicable thermal MVA facility rating and voltage levels remain within 0.95 pu
9 and 1.07 pu for 230kV stations. Without the Project, mitigation of these
10 overloads would require the interruption of service of [REDACTED] to [REDACTED] customers
11 (approximately [REDACTED] to [REDACTED] people), depending on the specific outage, in
12 order to continue to operate the facilities in accordance with NERC Reliability
13 Standards.

14 **Q. How would construction of the BMP provide for further load growth as well**
15 **as resolve these contingencies?**

16 A. The BMP will provide an alternate 230kV transmission path to relieve the
17 existing Manatee-Ringling 230kV transmission network and will also provide
18 service to 3 new FPL distribution substations and one PRECO distribution
19 substation. The construction of the BMP, based on a projected in-service date of
20 December 2011, would mitigate the thermal overloads and low voltage conditions
21 caused by single contingency events in accordance with NERC Reliability
22 Standards and would provide service to existing and new customers at a

1 comparable level of reliability to that delivered to other FPL customers as the load
2 in the Project Service Area continues to grow.

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

4 A. As part of the planning process, FPL evaluates the loss of all transmission lines
5 within a transmission corridor. In this case, 3 of the 5 existing 230kV
6 transmission facilities used to serve the Project Service Area are located on a
7 common ROW between the Manatee and Ringling Substations. The Project
8 Service Area receives power through several transmission lines that are subject to
9 a collective outage arising through such events as a plane crash or tornado.
10 Placing the new circuit in a separate ROW would provide the transmission system
11 serving the Project Service Area with another diverse path for the transmission of
12 power.

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

14 A. In my opinion, the construction of the BMP on a separate ROW provides
15 increased reliability benefits and would enhance the restoration of service to
16 customers. Construction of the BMP on a geographically separate ROW will
17 clearly reduce the number of customers that would lose power in the event a
18 catastrophic event impairs the lines situated in the common ROW that serve the
19 rapidly growing population in the Project Service Area. Moreover, the length of
20 time a particular customer would be without power would likely be lessened since
21 a new 230kV transmission line in a separate ROW would provide FPL with
22 increased operational flexibility to rotate outages thereby reducing service
23 unavailability time for customers in the Project Service Area.

1 **Q. Are there other reliability and strategic benefits associated with the Project?**

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

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DISCUSSION OF ALTERNATIVES

16 **Q. Did FPL consider alternatives to the BMP?**

17 A. Yes.

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

19 A. The factors used to evaluate the performance of the alternatives included
20 reliability, cost, construction feasibility, operational flexibility, ROW diversity,
21 and future transmission system expandability.

22 **Q. Please describe the transmission alternatives that were considered and
23 explain the reasons why they were rejected.**

24 A. The following three transmission alternatives were considered:

1 Alternative I – This alternative consists of building a new 230kV transmission
2 line on a new ROW from FPL’s existing Manatee Substation to a proposed future
3 Bluejay Transmission Substation located approximately 16 miles southeast of the
4 proposed Bobwhite Substation. The portion of the route from the proposed
5 Bobwhite Substation to the Bluejay Substation would be constructed on existing
6 corridor looping the existing Ringling-Charlotte 230kV transmission line between
7 Polo and Charlotte Substations. This new transmission line would provide
8 transmission service to as many as 2 future FPL substations and one future
9 PRECO distribution substation.

10 Alternative I was rejected for the following reasons:

- 11 1. This alternative would require additional upgrades to the existing
12 transmission network (6 transmission lines/sections) at a higher cost than
13 the BMP.

- 14
15 2. This alternative will not provide future transmission network flexibility,
16 because only one 230kV transmission line exists on the Ringling-Charlotte
17 230kV transmission line corridor. If the existing 138kV line were to be
18 looped into Bluejay Substation, 230/138kV transformation would be
19 required, thereby increasing the cost of the alternative.

20 Alternative II – Consists of building a new 230kV transmission line from the
21 existing Manatee Substation to the existing Howard Substation.
22

1 Alternative II was not considered a viable option because the existing Howard
2 Substation property is completely full. It is in a residential area with no
3 possibility for site expansion. A new 230kV line terminal could not be built at the
4 Howard Substation. Therefore, this alternative was deemed not feasible.

5 Alternative III – Consists of building a new 230kV transmission line from the
6 existing Manatee Substation to a proposed future Bobwhite Substation located
7 within the existing common ROW and looping the existing Ringling-Laurelwood
8 230kV transmission lines. This new transmission line would provide
9 transmission service to as many as 2 future FPL distribution substations from
10 existing transmission lines within the existing ROW.

11 Alternative III was rejected for the following three reasons:

- 12 1. This alternative would require looping in and out from existing
13 transmission lines located within the common ROW to the locations of
14 FPL's future distribution substations, thereby increasing the cost of the
15 alternative.
- 16 2. This alternative will not provide for corridor diversity. In the event of the
17 loss of the existing corridor with three major 230kV transmission lines
18 (and the new Bobwhite-Manatee line), the power transfer from Manatee to
19 Ringling could be seriously jeopardized and customer outages in the
20 Project Service Area could be required.
- 21 3. This alternative does not provide for the efficient integration of future
22 distribution substations to the east of the existing transmission corridor,
23 thereby increasing future costs to FPL's customers.

1 **Q. Please describe why generation alternatives were not considered viable.**

2 A. Generation alternatives such as siting a new generator in the Project Service Area
3 were not considered viable for the following reasons:

4 1. Adding a new generator within the Project Service Area would require
5 additional transmission facilities to interconnect and integrate the new
6 generation above and beyond what is presently required by the proposed
7 project at a significant increase in cost.

8 2. The need to provide transmission service to future proposed substations is
9 not solved by adding generation in the Project Service Area.

10 **Q. Please describe why distribution alternatives were not considered viable.**

11 A. Distribution alternatives such as expanding existing substations were not
12 considered viable because expansion of existing distribution substations will not
13 address the primary need for this Project (i.e. reinforcement of existing Manatee-
14 Ringling 230kV transmission network). Accordingly, a distribution alternative
15 was not considered further.

16 **ADVERSE CONSEQUENCES OF DELAY OR DENIAL OF THE PROJECT**

17 **Q. Would there be adverse consequences to FPL's customers in the Project**
18 **Service Area if the BMP is not timely approved?**

1 A. Yes. If the BMP is not timely approved and no other alternative is built,
2 inadequate transmission capability would result, therefore jeopardizing reliable
3 service to existing and future customers in the Project Service Area as discussed
4 in Section IV of Exhibit "A". The inability to serve additional loads could lead to
5 the implementation of rolling outages to prevent system degradation.

6 **Q. What would be the impact if certification of the BMP were denied?**

7 A. If certification of the BMP were denied, FPL would most likely pursue
8 Alternative III as shown in Attachment 10 of Exhibit "A". This would result in a
9 less reliable and more costly alternative and one that is not in the best long term
10 interest of FPL's customers.

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

12 A. Yes. The Commission should determine that there is a need for a 230kV
13 transmission line connecting the Manatee and proposed Bobwhite Substations.
14 The Commission should also determine that the cost and reliability benefits of the
15 Project would be enhanced by construction of the line in a geographically separate
16 ROW.

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

18 A. Yes.

1 COMMISSIONER ARRIAGA: At this time I'd like to ask
2 if there's anyone present here that would like to give any
3 public testimony.

4 Seeing none. Ms. Brown, next order of business.

5 MS. BROWN: The next order of business would be a
6 decision by you all whether you're prepared to make a bench
7 decision on each of the stipulated issues in the case. No
8 posthearing filings would be necessary. And this is, I would
9 say, done frequently in transmission need determinations
10 because the time frame to conduct the proceedings is quite
11 short. So we're prepared to suggest that you approve all the
12 stipulations on Pages 4 through 6, Issues 1 through 5 in the
13 prehearing order, and staff is prepared to answer any questions
14 you may have.

15 COMMISSIONER ARRIAGA: Thank you, Ms. Brown.

16 Commissioners, we can either vote on a bench decision
17 or deny or we can vote the whole package or vote stipulation by
18 stipulation. What would you prefer?

19 COMMISSIONER CARTER: I think we can just vote the
20 whole thing up. That's fine with me. If I'm in order, I would
21 be prepared to make that motion, Mr. Chairman.

22 COMMISSIONER ARRIAGA: Okay. I did ask staff to be
23 prepared to go stipulation by stipulation in case you wanted to
24 do so. But if you would like to vote the whole package, I will
25 entertain a motion.

1 COMMISSIONER CARTER: I would so move.

2 COMMISSIONER TEW: Second.

3 COMMISSIONER ARRIAGA: All those in favor, say aye.
4 Nays?

5 (Unanimous affirmative vote.)

6 COMMISSIONER ARRIAGA: So it's approved, a bench
7 decision that we approve the stipulations.

8 MS. BROWN: Yes, Commissioner. And as far as I know,
9 there are no other matters to be addressed. The final order in
10 the case will be issued by August 28th.

11 COMMISSIONER ARRIAGA: Thank you, Ms. Brown.

12 Commissioners, any other question, any other comment?

13 Mr. Hoffman, thank you so much. Any other comment?

14 MR. HOFFMAN: The only other thing, Commissioner, is
15 just to make sure we've had -- I just want to make sure that
16 the record is complete and that we've had the testimony and the
17 exhibits entered into the record.

18 COMMISSIONER ARRIAGA: I did mention that, to order
19 that --

20 MR. HOFFMAN: I just wanted to make sure. Thank
21 you .

22 COMMISSIONER ARRIAGA: Yes, the prefiled testimony
23 and exhibits were ordered to be entered into the record as
24 though read.

25 MR. HOFFMAN: Thank you.

1 COMMISSIONER ARRIAGA: Okay. Ms. Brown, no other
2 matters?

3 MS. BROWN: No other matters, Commissioners.

4 COMMISSIONER ARRIAGA: Okay. Thank you so much. The
5 meeting is adjourned.

6 (Hearing adjourned at 9:50 a.m.)

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1 STATE OF FLORIDA)
: CERTIFICATE OF REPORTER
2 COUNTY OF LEON)

3

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

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

9 I FURTHER CERTIFY that I am not a relative, employee,
attorney or counsel of any of the parties, nor am I a relative
10 or employee of any of the parties' attorneys or counsel
connected with the action, nor am I financially interested in
11 the action.

12 DATED THIS 9th DAY OF AUGUST, 2006.

13

14 Linda Boles
LINDA BOLES, RPR, CRR
15 FPSC Official Commission Reporter
(850) 413-6734

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