

STEEL
HECTOR
& DAVIS

REGISTERED LIMITED LIABILITY PARTNERSHIP

ORIGINAL

Steel Hector & Davis LLP
215 South Monroe, Suite 601
Tallahassee, Florida 32301-1804
850.222.2300
850.222.8410 Fax
www.steelhector.com

Charles A. Guyton
850.222.3423

July 16, 2002

RECEIVED FPSC
02 JUL 16 PM 4:09
COMMISSION
CLERK

-VIA HAND DELIVERY-

Ms. Blanca S. Bayó
Division of the Commission Clerk
and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket Nos. 020262-EI and 020263-EI

Dear Ms. Bayó:

On March 22, 2002, Florida Power & Light Company ("FPL") filed a Petition for Determination of Need for an Electrical Power Plant - Martin Unit 8 and a Petition for Determination of Need for an Electrical Power Plant - Manatee Unit 3. FPL's two petitions were assigned Docket Nos. 020262-EI and 020263-EI, respectively.

On April 22, 2002, FPL moved to hold both proceedings in abeyance to allow FPL to undertake a Supplemental Request for Proposals (Supplemental RFP). On April 29, 2002, FPL filed an emergency motion for waiver of Rule 25-22.080(2), F.A.C., to allow deferral of the hearing schedule if, as a result of the Supplemental RFP, Martin Unit 8 and Manatee Unit 3 were determined to be the most cost-effective alternatives to meet FPL's 2005 and 2006 need. By Order No. PSC-02-0571-PCO-EI, Commissioner Deason, acting as prehearing officer, substantially granted FPL's emergency motion to hold both proceedings in abeyance, and by Order No. PSC-02-0703-PCO-EI, the Commission granted FPL's emergency waiver of Rule 25-22.080(2).

- AUS _____
 - CAF _____
 - CMP _____
 - COM 5 *orig let*
 - CTR _____
 - ECR 7
 - GCL _____
 - OFC _____
 - MMS _____
 - SEC 1
 - OTH 1 to
- each file*

FPL has completed its Supplemental RFP. FPL's analysis shows that Martin Unit 8 and Manatee Unit 3 are the most cost-effective options to meet FPL's 2005 and 2006 need for capacity. Consequently, FPL is now prepared, consistent with Order Nos. PSC-02-0571-PCO-EI

RECEIVED & FILED

MW

FPSC BUREAU OF RECORDS

07384-02 thru 07400-0

Miami

West Palm Beach

Tallahassee

Key West

London

Caracas

São Paulo

Rio de Janeiro

and PSC-02-0703-PCO-EI, for the Commission to proceed with its evaluation of the need for those two units in Docket Nos. 020262-EI and 020263-EI. The documents enclosed herewith, as described below, provide the information required for that evaluation.

Enclosed for filing on behalf of FPL in Docket Nos. 020262-EI and 020263-EI are the original and fifteen copies of:

- (1) FPL's Motion for Leave to Amend Petitions for Determination of Need
- (2) FPL's Amended Petition for Determination of Need for an Electrical Power Plant-Martin Unit 8
- (3) FPL's Amended Petition for Determination of Need for an Electrical Power Plant-Manatee Unit 3

Because the same analysis supported FPL's assessment of its 2005 and 2006 capacity needs and its determination that Martin Unit 8 and Manatee Unit 3 were the most cost-effective alternatives to meet the needs, FPL previously filed a motion to consolidate both dockets. Consistent with its motion to consolidate, FPL filed along with its original Need Determination petitions a single Need Study for Electrical Power Plant and a single set of Need Study Appendices, as well as a common set of testimony for both dockets. FPL continues to seek consolidation of these dockets for hearing.

In support of its amended Petitions for Determination of Need for Martin Unit 8 and Manatee Unit 3, FPL is filing the original and 15 copies of the following documents:

- (1) Need Study For Electrical Power Plant, 2005-2006
- (2) Need Study Appendices A - D
- (3) Need Study Appendices E - J
- (4) Need Study Appendices K - O
- (5) Direct Testimony of Dr. William E. Avera
- (6) Direct Testimony of C. Dennis Brandt
- (7) Direct Testimony of Moray P. Dewhurst
- (8) Direct Testimony of Leonardo E. Green
- (9) Direct Testimony of Rene Silva
- (10) Direct Testimony of Dr. Steven R. Sim

- (11) Direct Testimony of Donald R. Stillwagon
- (12) Direct Testimony of Alan S. Taylor
- (13) Direct Testimony of William L. Yeager
- (14) Direct Testimony of Gerard Yupp

These documents reflect the results of FPL's Supplemental RFP and supercede the Need Study and Appendices and its Direct Testimony filed on March 22, 2002, in support of its initial Petitions for Determination of Need. Therefore, FPL hereby withdraws the March 22 Need Study and Appendices and the March 22 Direct Testimony.

Copies of the enclosed documents, are being provided to counsel for all parties of record. Under separate cover letter, FPL is filing its confidential appendices to the Need Study and a Request for Confidential Classification for the confidential appendices.

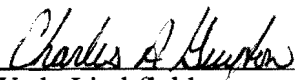
With the interruption of these proceedings for the Supplemental RFP, it is important that FPL's need determination proceedings be heard expeditiously. Prior to the Commission's granting of FPL's Emergency Motion To Hold The Proceedings In Abeyance, the parties had agreed to a schedule that would result in a hearing on October 2-4, 2002, a Commission decision on November 19, 2002, and a final order no later than December 4, 2002. FPL needs to preserve this schedule in order to meet its scheduled in-service date of June 2005 for both Martin Unit 8 and Manatee Unit 3. To facilitate this schedule, FPL has: (a) included more detailed data in the enclosed Need Study and Appendices than is required by Commission rule; (b) filed its direct testimony along with its amended petitions; (c) worked out with the intervenors free access to the primary analytical tools used in conducting the economic analysis of the Supplemental RFP; (d) agreed to a Confidentiality Agreement and process to allow intervenor access to most confidential data; and (e) agreed to expedited discovery. FPL will continue to work with the Commission and the parties to facilitate the Commission's prompt consideration of these proceedings.

Any delay in these proceedings would place at risk the in-service dates of Martin Unit 8 and Manatee Unit 3. In the event of delay, FPL would not achieve its 20 percent reserve margin criteria (or even a 15 percent reserve margin) in the summer of 2005. Without purchases of capacity to replace these facilities, an option which may not be available for the full capacity of these units, the reliability of FPL's system could be significantly adversely impacted to the detriment of FPL's customers. In the event of a delay, if FPL were to attempt to purchase capacity and energy to replace these units, FPL likely would pay higher costs than the costs it would incur if these units had met their in-service dates. Thus, delay also would adversely impact the costs paid by FPL's customers.

Because a delay would cause adverse impacts upon FPL's customers, FPL respectfully requests that these proceedings be processed according to the previously agreed schedule and that an Order on Procedure be issued. Such an order should place reasonable limits on discovery, encourage intervenors to coordinate discovery as they have previously agreed to do,

expedite discovery as previously agreed and set forth the agreed-to schedule, thereby facilitating the administration of these proceedings.

Respectfully submitted,



R. Wade Litchfield
Charles A. Guyton

Attorneys for Florida Power
& Light Company

CAG/gc
Enclosures

cc: Counsel for Parties of Record

MIA2001 122447v1

**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

**DOCKET NOS. 020262-EI, 020263-EI
FLORIDA POWER & LIGHT COMPANY**

JULY 16, 2002

**IN RE: PETITION FOR DETERMINATION OF NEED FOR
PROPOSED ELECTRICAL POWER PLANT
IN MARTIN COUNTY
OF FLORIDA POWER & LIGHT COMPANY**

**IN RE: PETITION FOR DETERMINATION OF NEED FOR
PROPOSED ELECTRICAL POWER PLANT
IN MANATEE COUNTY
OF FLORIDA POWER & LIGHT COMPANY**

DIRECT TESTIMONY & EXHIBITS OF:

RENE SILVA

DOCUMENT NUMBER-DATE

07395 JUL 16 8

FPSC-COMMISSION CLERK

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF RENE SILVA**

4 **DOCKET NOS. 020262-EI, 020263-EI**

5 **JULY 16, 2002**

6
7 **Q. Please state your name and business address.**

8 A. My name is Rene Silva, and my business address is 9250 West Flagler Street,
9 Miami, Florida 33174.

10
11 **Q. By whom are you employed and what position do you hold?**

12 A. I am employed by Florida Power & Light Company (FPL), and presently
13 serve as Director of Resource Assessment and Planning (RAP).

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

16 A. I manage the group that is responsible for the development of FPL's
17 integrated resource plan and other related activities, such as analysis of
18 demand side management programs, system production cost projections,
19 development of FPL's demand and energy forecasts, and the administration of
20 wholesale power purchase agreements.

21
22 **Q. Please describe your education and professional experience.**

1 A. I graduated from the University of Michigan with a Bachelor of Science
2 Degree in Engineering Science in 1974. From 1974 until 1978, I was
3 employed by the Nuclear Energy Division of the General Electric Company in
4 the area of nuclear fuel design. While employed by General Electric, I earned
5 a Masters Degree in Mechanical Engineering from San Jose State University
6 in 1978.

7
8 I joined the Fuel Resources Department of FPL in 1978, as a fuel engineer,
9 responsible for purchasing nuclear fuel. While employed by FPL I earned a
10 Masters Degree in Business Administration from the University of Miami in
11 1986. In 1987, I became Manager of Fossil Fuel, responsible for FPL's
12 purchases of fuel oil, natural gas and coal. In 1990 I assumed the position of
13 Director, Fuel Resources Department, and in 1991 became Manager of Fuel
14 Services, responsible for coordinating the development and implementation of
15 FPL's fossil fuel procurement strategy. In 1998 I was named Manager of
16 Business Services in the Power Generation Division (PGD). In that capacity I
17 managed the group that is responsible for coordinating (a) the development of
18 PGD's strategic plan for the effective and efficient construction, operation and
19 maintenance of FPL's fossil generating plants, (b) the preparation of PGD
20 annual budgets and tracking of expenditures, and (c) the preparation of reports
21 related to fossil generating plant performance. On May 1, 2002, I was
22 appointed to my current position.

23

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

2 A. My testimony introduces FPL's Need Study document and appendices and
3 identifies the sponsors of each of the sections contained within that document.
4 I also introduce the FPL witnesses in this case and describe the areas of the
5 case they will cover.

6

7 In addition to this introductory role, my testimony:

- 8 - Describes FPL's Need Study Document,
- 9 - Summarizes the focus of each witness' testimony,
- 10 - Summarizes FPL's need for new resources in the 2005/2006 time
11 frame, the Supplemental Request for Proposals (Supplemental RFP)
12 issued by FPL to address those needs, and the results of the
13 solicitation,
- 14 - Briefly presents the results of the analysis of bids received in response
15 to the Supplemental RFP,
- 16 - Describes selection of the "short list" of bidders and the
17 communications and negotiations that took place between FPL and
18 those "short list" bidders,
- 19 - Discusses a number of qualitative factors which are incorporated into
20 FPL's decision making process, and
- 21 - Discusses the adverse consequences to FPL's customers if the
22 proposed Martin Unit 8 and Manatee Unit 3 projects are not brought
23 into service by the target dates.

1 **Q. Are you sponsoring an exhibit in this case?**

2 A. Yes. I am sponsoring an exhibit consisting of 8 documents attached to my
3 direct testimony. Those 8 documents are:

4

- 5 • Document RS-1, FPL's generating resources,
- 6 • Document RS-2, Summary of FPL's power purchases,
- 7 • Document RS-3, Schedule of FPL's QF purchases,
- 8 • Document RS-4, List of 16 bidders who responded to FPL's Supplemental
9 RFP, the types of proposals submitted and technology,
- 10 • Document RS-5, List of 31 eligible bids received by FPL in response to its
11 Supplemental RFP,
- 12 • Document RS-6, Summary of results presented to FPL management on
13 June 18,
- 14 • Document RS-7, Updated version, as of July 2, 2002, of Document RS-6,
15 and
- 16 • Document RS-8, Fossil System Net Heat Rate.

17

18 **Q. Are you sponsoring any sections in the Need Study document?**

19 A. Yes. I am sponsoring the following sections:

20 Section I Executive Summary

21 Section II Introduction

22 Section VIII Conclusion

1 I also co-sponsor Section V with Dr. Steven Sim and Section VII with Mr.
2 William Yeager.

3
4 In addition, I sponsor Appendices A and B to the Need Study document.

5
6 **I. Description of FPL's Need Study document**

7
8 **Q. Please describe FPL's Need Study document supporting its Petitions for**
9 **Determination of Need for the Martin Unit 8 and Manatee Unit 3**
10 **projects.**

11 A. The Need Study document is a comprehensive overview of FPL's planning
12 process, and of the Supplemental RFP process used to identify the Martin Unit
13 8 and Manatee Unit 3 projects as the most cost-effective alternatives for new
14 resources. The document consists of eight sections:

- 15 Section I Executive Summary
- 16 Section II Introduction
- 17 Section III Description of Proposed Power Plants
- 18 Section IV FPL's Need for the Proposed Power Plants
- 19 Section V FPL's Process for Determining the Best Available
20 Options
- 21 Section VI Non-Generating Alternatives
- 22 Section VII Adverse Consequences if the Proposed Capacity
23 Additions are not Added on Schedule

1 Section VIII Conclusion

2
3 Section I provides a summary of the overall process FPL employed to identify
4 its capacity needs and the results of the process.

5
6 Section II describes FPL's existing system and provides the underlying
7 methodologies and assumptions used in the analyses, including the load
8 forecasting methodology.

9
10 Section III provides a detailed description of the proposed Martin Unit 8 and
11 Manatee Unit 3 projects, including cost and performance expectations.

12
13 Section IV describes the analysis which concluded that FPL has a need for
14 1,722 MW in the 2005/2006 timeframe.

15
16 Section V describes in detail FPL's general planning process, the
17 Supplemental RFP process employed to solicit bids from other parties to meet
18 the identified capacity needs, the analytical process used to evaluate those
19 bids, and FPL's negotiations with the short list bidders.

20
21 Section VI details the non-generating alternatives considered by FPL prior to
22 determining a need for additional capacity and addresses the potential for
23 additional cost-effective Demand Side Management (DSM) programs.

1 Section VII discusses the adverse consequences that would result from delay
2 of licensing the Martin Unit 8 and Manatee Unit 3 projects, including a
3 deterioration of system reliability and increased costs.

4
5 Section VIII is a summary of the need for the new capacity, the cost-
6 effectiveness of the Martin Unit 8 and Manatee Unit 3 projects and the
7 processes FPL employed to reach these conclusions.

8
9 **II. Focus of Witnesses' Testimony**

10
11 **Q. Please summarize the testimony of the other witnesses who will appear on**
12 **FPL's behalf in this proceeding.**

13 **A.** Dr. Leonardo Green describes FPL's load forecasting process, discusses the
14 assumptions used in that process, and presents the resulting load forecast,
15 which has been used in FPL's integrated resource planning analysis to identify
16 FPL's resource needs in 2005 and 2006, and in the economic analysis of the
17 various alternatives proposed by FPL and others to meet those needs. Dr.
18 Green is the sponsor of Section V.B. of the Need Study, the portion of
19 Appendix C of the Need Study that discusses FPL's sales and load forecast
20 models and Appendix G to the Need Study.

21
22 Dr. Steven Sim describes FPL's resource planning process, identifies FPL's
23 additional resource needs in 2005 and 2006, describes FPL's proposed self-

1 build options to meet those resource needs, discusses FPL's Supplemental
2 RFP issued on April 26, 2002, and the proposals received in response to the
3 Supplemental RFP, explains, in detail, the process FPL followed to perform
4 the economic evaluation of the eligible outside proposals and the FPL self-
5 build options, discusses the assumptions used in the analyses, with the
6 exception of the load forecast and fuel forecast, which are presented by Dr.
7 Green and Mr. Yupp, respectively, and presents the results of the economic
8 evaluation. Dr. Sim demonstrates that the combination of FPL's Martin Unit 8
9 and Manatee Unit 3, both in 2005, results in the lowest cost to FPL's
10 customers. Dr. Sim is sponsoring Section IV and co-sponsoring Section V of
11 the Need Study. He is sponsoring the portion of Appendix C that describes the
12 EGEAS and TIGER models and Appendices C, D, E, F, J and K, and co-
13 sponsoring Appendices M and N to the Need Study.

14
15 Mr. Alan Taylor describes his role as an independent evaluator of the new
16 capacity proposals received by FPL in response to the Supplemental RFP and
17 of FPL's self-build alternatives, describes the process he followed and the
18 tools he used to conduct his evaluation, and presents the results of that
19 evaluation and explains his conclusion that the combination of Martin Unit 8
20 and Manatee Unit 3 constitutes the most cost-effective portfolio that meets
21 FPL's resource needs.

22

1 Mr. William Yeager presents the engineering details of FPL's proposed
2 Martin Unit 8 project, which consists of the conversion of two simple-cycle
3 combustion turbines to a new state-of-the art 4x1 combined cycle unit, and the
4 Manatee Unit 3 project, which involves the construction of a new state-of-the
5 art 4x1 combined cycle unit. Included in his testimony are the cost and
6 performance specifications of these proposed units, corresponding to the data
7 used in FPL's analysis. Mr. Yeager sponsors Section III of the Need Study,
8 except for the transmission integration discussions sponsored by Mr.
9 Stillwagon, as well as a portion of Appendix L to the Need Study.

10
11 Mr. Dennis Brandt's testimony presents the details of FPL's DSM goals, and
12 FPL's DSM programs and plan. He demonstrates that there is not sufficient
13 DSM potential to avoid the proposed generating units. Mr. Brandt is
14 sponsoring Section VI and Appendix O of the Need Study.

15
16 Mr. Donald Stillwagon describes the transmission assessment and calculations
17 performed under his direction and control to determine the transmission
18 integration costs associated with those capacity combinations identified by Dr.
19 Sim's analysis as being economically competitive, and presents the results of
20 that process. He also presents the transmission integration facilities and costs
21 associated with Martin Unit 8 and Manatee Unit 3. He sponsors the
22 transmission integration discussions in Section III of the Need Study and the
23 direct cost estimates in Appendix M to the Need Study.

1 Dr. William Avera addresses the impact of power purchase contracts on FPL's
2 financial position and describes the method FPL used to account for this
3 impact in its evaluation of capacity proposals submitted in response to the
4 Supplemental RFP. His testimony discusses the financial risks associated with
5 purchased power contracts and the importance of recognizing these
6 implications in an economic evaluation of power supply alternatives. Dr.
7 Avera concludes that FPL's calculation to determine the amount of cost to
8 impute to the outside bids was based on reasonable assumptions, and that the
9 application of the resulting equity penalty in its analysis of the capacity
10 proposals is consistent with both the Standard & Poor's Corporation (S&P)
11 methodology and prior Florida Public Service Commission (FPSC) practice.
12 Dr. Avera is co-sponsoring Appendix N to the Need Study along with Dr. Sim
13 and Mr. Dewhurst.

14
15 Mr. Moray Dewhurst describes the importance, from the perspective of both
16 FPL and FPL's customers, of ensuring that the entities with whom FPL may
17 enter into a capacity and energy contract have, and will maintain, the level of
18 financial viability necessary to ensure that their facilities will be constructed,
19 completed on schedule, and properly operated and maintained. Mr. Dewhurst
20 also explains the need for, and appropriateness of, applying the equity penalty
21 included in the economic analysis to any plan that results in FPL entering into
22 a power purchase contract. Mr. Dewhurst sponsors Appendix I to the Need
23 Study.

1 Mr. Gerard Yupp describes the transportation alternatives available to deliver
2 natural gas to FPL's Martin Unit 8 and Manatee Unit 3 and explains why FPL
3 does not need to design Manatee Unit 3 as a dual-fuel unit with light oil
4 capability. He addresses the ready availability of natural gas for Martin Unit 8
5 and Manatee Unit 3. Mr. Yupp also supports the fuel price forecast used in
6 FPL's economic analysis of its self-build option and the outside proposals in
7 the Supplemental RFP. Mr. Yupp sponsors Section V.B.2 and Appendix H of
8 the Need Study.

9
10 **III. FPL's Capacity Need and Supplemental Request for Proposals**

11
12 **Q. Please describe FPL's electric generating system.**

13 A. To serve its customers, FPL has 17,860 MW of generating resources at 14
14 sites located throughout its service territory and beyond, including partial
15 ownership of one unit located in Georgia and partial ownership of two units
16 located in Jacksonville. The location of these FPL generating units, their fuel
17 types, and their projected summer capabilities for 2002 are shown in a map
18 attached to my testimony as Document RS-1.

19
20 **Q. Does FPL purchase power from other sources in addition to its own
21 generation resources to meet demand?**

22 A. Yes. FPL purchases from utility/non-utility sources and qualifying facilities
23 (QFs). Over the next 10 years, to meet seasonal peak demand, FPL will

1 purchase from utility/non-utility sources as much as 2,620 MW (winter). By
2 summer of 2010, the purchases are expected to decline to 382 MW. A
3 summary of these power purchases is provided in Document RS-2. FPL also
4 will purchase as much as 877 MW from QFs within the next 10 years. By the
5 summer of 2010, QF purchases are expected to decline to 640 MW. A
6 schedule of QF purchases is provided in Document RS-3.

7
8 The decline in purchased power and QF purchases is simply a result of the
9 expiration of a number of different contracts. For example, FPL's current
10 Unit Power Sale (UPS) purchases from the Southern Companies terminates in
11 2010, and FPL has not decided how to replace this capacity at this time. A
12 number of other purchases are shorter-term, intended to help FPL achieve a
13 20% reserve margin in the near term, but not needed beyond the period FPL's
14 Supplemental RFP was intended to address.

15
16 **Q. How much DSM is included in FPL's resource plan?**

17 A. Measured from the end of 2001, FPL's cumulative DSM goal is to achieve
18 approximately 565 MW of additional summer peak demand reduction at the
19 meter through 2009, the end of the current goal setting period. This reduction
20 is in addition to the 3,076 MW of demand reduction at the generator already
21 accomplished through 2001. This reduction to date, after accounting for
22 reserve margin requirements, translates to an avoidance of more than 3,600

1 MW of generation requirements, while FPL's goals from 2002 to 2009
2 represent approximately an additional 725 MW of capacity avoidance.

3
4 **Q. What were FPL's actual peaks and net energy for load during 2001?**

5 A. FPL experienced a record summer peak of 18,754 MW in 2001, an increase of
6 5.3% from the 2000 summer peak. The winter peak for 2000/2001 was
7 18,199 MW, a 6.7% increase from the previous year. Net Energy for Load
8 (NEL) in 2001 was 98,404 GWh, up 2.5% from 2000.

9
10 **Q. What is FPL's projected total peak load for the summer of 2005 and**
11 **2006, respectively?**

12 A. As shown in Dr. Green's testimony, FPL's projected total summer peak loads
13 for 2005 and 2006 are 20,719 MW and 21,186 MW, respectively.

14
15 **Q. What are FPL's projected additional resource needs for 2005 and 2006,**
16 **respectively?**

17 A. As shown in Dr. Sim's testimony, in order to maintain a 20% reserve margin,
18 FPL needs 1,122 MW of new generation capacity by June 1, 2005, and an
19 additional 600 MW of new generation capacity by June 1, 2006. This results
20 in a total required increase in capacity of 1,722 by June 1, 2006.

21
22 **Q. Why does FPL apply a 20% reserve margin target to determine its need**
23 **for 2005 and 2006 ?**

1 A. In 1998 the Commission staff expressed concern over the projected level of
2 reserves in the state. The Commission initiated an investigation of reserve
3 margins and, in that case, FPL and the other investor-owned utilities in
4 peninsular Florida proposed and voluntarily agreed to begin using 20% of
5 annual peak as a reserve margin criterion and to achieve this level of reserves
6 by summer 2004. The Commission approved this stipulation in Order No.
7 PSC-99-2507-S-EU. FPL continues to use a dual criteria approach to assess
8 system reliability, leaving in place the 0.1 days/year Loss of Load Probability
9 (LOLP) standard and a reserve margin standard of 15% of annual peak until
10 mid-2004, at which time the reserve margin standard becomes 20% of annual
11 peak.

12
13 **Q. Which reliability criterion is the primary driver of the need for new**
14 **resources?**

15 A. As discussed by Dr. Sim, FPL's need for new resources is driven by the 20%
16 summer reserve margin criterion. Use of LOLP alone would result in a lower
17 level of resource additions.

18
19 **Q. How does FPL plan to meet its 2005/2006 need for new resource**
20 **capacity?**

21 A. As discussed by Dr. Sim, FPL has identified a need for approximately 1,722
22 MW in the 2005/2006 time frame. FPL plans to meet this need by converting
23 Martin Unit 8 to combined cycle, which adds 789 MW of summer capacity,

1 and adding Manatee Unit 3 combined cycle, which adds 1,107 MW of
2 summer capacity to FPL's system. These are the most cost-effective resource
3 options for FPL's customers.

4
5 **Q. Do the units identified by FPL require licensing under the Power Plant
6 Siting Act (PPSA)?**

7 A. Yes. Manatee Unit 3 and Martin Unit 8 will each add more than 75 MW of
8 steam capacity in their proposed configurations, and therefore would require
9 FPL to pursue licensing under the PPSA, including a Determination of Need
10 filing with this Commission.

11
12 **Q. Did FPL issue a request for proposals prior to seeking a Determination of
13 Need for these units?**

14 A. Yes. Not once, but twice.

15
16 **Q. When did FPL issue its initial request for proposals?**

17 A. FPL issued an announcement of its initial request for proposals on August 13,
18 2001.

19
20 **Q. What was the result of the initial request for proposals?**

21 A. FPL received 80 eligible proposals from 15 bidders, and after its analysis, as
22 well as the analysis of an independent evaluator, FPL determined that building

1 Manatee Unit 3 and expanding Martin Unit 8 to meet its 1,722 MW need was
2 the lowest cost alternative.

3

4 **Q. When did FPL issue its Supplemental RFP?**

5 A. FPL issued its Supplemental RFP on April 26, 2002.

6

7 **Q. Please summarize the Supplemental RFP.**

8 A. As explained in greater detail by Dr. Sim, the Supplemental RFP requested up
9 to 1,722 MW of firm capacity in the 2005/2006 time frame. Proposals for
10 power purchases of from 3 to 25 years and turnkey bids for new units were
11 specifically noted as acceptable. No technology preference was stated; in fact,
12 FPL invited any project of any type that would satisfy FPL's capacity needs.
13 By leaving the timing and technology open, FPL did not preclude sales from
14 other utility systems, construction of new units, or sales from existing units. In
15 addition, tolling agreements, under which FPL would purchase and deliver
16 the fuel utilized at a generating plant owned and operated by an independent
17 power producer, were specifically noted as acceptable in the Supplemental
18 RFP. FPL's intent was to make the solicitation as open as possible.

19

20 **Q. How many bidders responded to FPL's Supplemental RFP?**

21 A. FPL received capacity bids from 16 organizations totaling approximately
22 12,500 MW. The 16 organizations, along with the type of proposal submitted
23 and the technology, are listed in Document RS-4.

1 **Q. Did any bidders submit multiple projects?**

2 A. Yes. When multiple proposals, with pricing, start date and term-of-service
3 variations were accounted for, FPL actually received 53 discrete alternatives
4 in response to its Supplemental RFP.

5
6 **Q. Were all of these 53 alternatives evaluated in the economic analysis?**

7 A. No. Only 31 separate proposals were eligible to be considered in the economic
8 analysis. As explained by Dr. Sim, one bidder, who had originally submitted
9 12 proposals under the initial request for proposals in 2001, submitted 16
10 proposals in response to the Supplemental RFP on May 24, 2002, but later
11 withdrew 4 of them to avoid paying the evaluation fee. This reduced the
12 number of bids to 49.

13
14 Three of the sixteen bidders were subsequently determined to be ineligible.
15 Because these 3 bidders were sponsoring 18 separate proposals, their removal
16 from consideration reduced the number of eligible proposals to 31. These 31
17 eligible bids are listed in Document RS-5.

18
19 **Q. Why did FPL declare the bids submitted by three of the bidders
20 ineligible?**

21 A. In the Supplemental RFP FPL listed nine Minimum Requirements which each
22 proposal should satisfy and noted that failure to satisfy all of the Minimum
23 Requirements would be grounds for determining a proposal ineligible. FPL

1 also indicated in the Supplemental RFP that it would undertake an initial
2 screening of the proposals to determine eligibility. FPL's Supplemental RFP
3 stated that any such proposals so screened would be returned along with their
4 associated fees.

5
6 A number of the Supplemental RFP bidders did not agree to the Completion
7 Security requirement of the Supplemental RFP. Consequently, FPL notified
8 each such bidder that the Completion Security requirement amount was a
9 Minimum Requirement necessary for their proposals to be considered. In
10 response, all but one of the bidders notified FPL of their willingness to
11 comply with the Completion Security requirement amount. The single
12 proposal submitted by the one bidder which did not indicate its willingness to
13 comply with the Completion Security requirement was determined to be
14 ineligible.

15
16 Another bidder is currently under contract with FPL to provide energy and
17 capacity to FPL in June of 2003 and has informed FPL that it will not be able
18 to meet its in-service date. Given that bidder's failure to perform under an
19 existing contract, the bidder's five proposals were determined to be ineligible.
20 FPL was unwilling to entrust its system reliability to a bidder which had
21 already announced an inability to perform on another contract, and which
22 appeared to lack the ability to finance, construct and operate facilities on
23 schedule.

1 Finally, twelve proposals submitted by another bidder were determined to be
2 ineligible because, in FPL's judgment, entering into a contract with this bidder
3 would result in an extremely high level of risk to FPL's customers. The bidder
4 has been accused of filing misleading financial statements, and of "gaming"
5 the system in the California energy market. FPL is simply unwilling to entrust
6 its system reliability to such an entity. Therefore, its twelve proposals were
7 determined to be ineligible.

8
9 It should be noted that these determinations of ineligibility were made without
10 consideration of the economic standing of the bidders' proposals. FPL was
11 not willing to entrust its system reliability to entities who were unwilling to
12 post Completion Security to protect customers, who were failing to perform
13 on another contract with FPL, or who had been accused of gross misconduct.

14
15 **Q. Do you consider FPL's Supplemental RFP to have been a successful**
16 **solicitation for new capacity?**

17 **A.** Yes. Based on the large number of both respondents and projects proposed, I
18 believe that FPL's Supplemental RFP was the most successful investor-owned
19 utility solicitation in Florida to date. Sixteen bidders, including three bidders
20 who had not participated in the initial request for proposal, submitted
21 proposals totaling over 12,500 MW. No other Florida investor-owned utility
22 has received this volume of responses to its Supplemental RFP. The
23 Supplemental RFP has certainly served the interests of FPL's customers.

1 **IV. Supplemental RFP Economic Analysis**

2
3 **Q. What is the objective of the economic analysis?**

4 A. The objective of the economic analysis is to identify the combination of
5 resources that results in the lowest cost (i.e., electric rates) to customers. The
6 economic analysis of competing alternatives must reflect all associated
7 quantifiable costs, both direct and indirect. For example, in comparing supply
8 alternatives, such as competing generating units, the direct costs would
9 include capital costs (or capacity payments), fixed operating and maintenance
10 (O&M) expenses, capital replacement costs, variable O&M expenses and fuel
11 costs, transmission interconnection and integration costs, and the cost of any
12 equity penalty resulting from entering into a power purchase obligation.
13 Indirect costs would include the change in the fuel costs of other, existing
14 generating units when the new unit is added to the system. This last item
15 might either be a cost (increase in other units' fuel costs) or a benefit
16 (reduction in other units' fuel costs). The totals of these costs for the various
17 combinations of resources, expressed as revenue requirements, are compared
18 over time on a cumulative net present value of revenue requirements
19 (CPVRR) basis.

20
21 Using competing new generation unit alternatives as an example, the
22 generating alternative with the lowest CPVRR over the period of the analysis,

1 which is equivalent to providing the lowest rates, is generally favored,
2 although other factors must be considered.

3

4 **Q. Have these direct and indirect costs been reflected in the economic**
5 **analyses?**

6 A. Yes. As explained by Dr. Sim and Mr. Taylor, all of the above costs have
7 been appropriately reflected in the economic analyses related to the
8 Supplemental RFP.

9

10 **Q. Should the costs of transmission integration for the various generation**
11 **plans be reflected in the economic analysis?**

12 A. Yes. Whether these transmission integration costs are assigned to a specific
13 project or rolled into overall rates, FPL's customers will pay those costs.
14 Therefore, for bid comparison purposes, the costs of transmission
15 enhancements must be, and have been quantified and should remain with the
16 generator or group of generators that cause the need for the enhancement.

17

18 The analyses performed to determine transmission integration costs are
19 addressed in the testimony of Mr. Stillwagon. He addresses the load flow
20 analysis performed, as well as the resulting cost estimates for 28 expansion
21 plans.

22

23 **Q. What is the equity penalty?**

1 A. The equity penalty is a real cost associated with power purchases. The cost is
2 a result of an imputation by rating agencies, such as S&P, of additional debt to
3 a purchaser who enters into a power purchase contract.

4
5 The equity penalty is addressed in the testimony of Drs. Sim and Avera,
6 Messrs. Dewhurst and Taylor. The equity penalty calculations performed in
7 this analysis are set forth in Appendix N of the Need Study.

8
9 **Q. What do the results of FPL's analysis show?**

10 A. The results of FPL's analysis show that the most cost-effective alternative for
11 FPL's customers when all costs are considered is the construction of a new
12 combined cycle unit at FPL's Manatee site (Manatee Unit 3) and the
13 conversion of Martin Unit 8, which currently consists of two simple cycle
14 combustion turbines (CTs), to a 4x1 combined cycle configuration. There is
15 no plan consisting entirely of non-FPL options that is even remotely
16 competitive with this Manatee/Martin plan. As Dr. Sim shows, the smallest
17 differential between the All-FPL self build plan and the best all non-FPL plan
18 was greater than \$470 million, (CPVRR).

19
20 Only a few combinations of either FPL's Manatee Unit 3 or Martin Unit 8,
21 respectively, with one or more non-FPL alternatives had total costs that came
22 within \$100 million of the All-FPL self build plan. The best of these

1 combination plans is \$83 million, (CPVRR), more expensive than the All-FPL
2 self build plan.

3
4 **Q. Was FPL's analysis independently verified?**

5 A. Yes. Mr. Taylor's firm, Sedway Consulting, Inc., was retained prior to the
6 analysis to run an independent study of the outside proposals and the FPL
7 options. As Mr. Taylor describes in his testimony, he used his own model to
8 perform the analysis.

9
10 **Q. What did Mr. Taylor's results show?**

11 A. Mr. Taylor obtained similar results from his studies. According to Mr.
12 Taylor's analysis, the All-FPL self build plan was better than the best
13 FPL/non-FPL combination plan by \$135 million (CPVRR), and better than
14 the best all-outside combination by more than \$423 million (CPVRR).

15
16 **Q. Do you believe that these results provide a reasonable basis for
17 concluding that the All-FPL self build plan is the most cost-effective
18 alternative available?**

19 A. Yes. Not only has FPL determined that its own self build options are the most
20 cost-effective, but also this result has been independently verified. The
21 analytical process was comprehensive and subject to an internal critical
22 review. Moreover, FPL undertook initial negotiations with the predominant
23 bidder in several of the next lowest cost plan; and these negotiations

1 reinforced the conclusion that the All-FPL self build plan is the most cost
2 effective option.

3

4 **IV. "Short List" Selection and Negotiation**

5

6 **Q. Please address how FPL developed its "Short List" for negotiations?**

7 A. Once Dr. Sim's group developed the lowest cost alternative plans available,
8 based on analysis results as of June 18, 2002 there were 33 plans that were
9 within \$200 million of the All-FPL self build plan. Many of these plans
10 consisted of the same options with different proposed terms of service. For
11 instance, one entity offering system sales offered the sales for either 3 or 5
12 year terms. Similarly, some entities offering capacity from one or more new
13 units offered mutually exclusive contract terms of various lengths from the
14 same unit(s). One entity offered capacity from units in two different locations,
15 each unit sufficient to meet all of FPL's need in 2006. Thus, many of the
16 alternative plans were mutually exclusive, containing options from the same
17 units but priced differently or with a different term. From this list of 33 plans,
18 I aggregated the alternative plans that did not include both FPL units into five
19 separate groups of mutually exclusive combinations (within each group) and
20 compared the cost of the best combination in each group to the cost of the All-
21 FPL self build plan. The comparative sheet is Document RS-6.

22

23 **Q. Please describe the five Groups shown on Document RS-6.**

1 A. The five groups shown in Document RS-6 are labeled Groups A through E.
2 Except for the bidders that were selected for the short list (i.e., Group A), the
3 names of the bidders whose proposals are reflected in these groups are coded to
4 comply with the bidders request for confidentiality.

5
6 Group A consists of FPL's Manatee Unit 3, 1,107 MW, and a 50 MW system
7 purchase from Florida Power Corporation ("FPC") in 2005, plus a 708 MW
8 purchase from an El Paso Merchant Energy Corporation ("El Paso") unit in
9 2006. There are three plans that consist of some combination of these three
10 options with varying contract terms, or different costs and locations, for the
11 FPC and El Paso alternatives. I chose the least cost plan from this Group A for
12 comparison. This Group A plan had a cost of \$58 million more than that of the
13 All-FPL self build plan. Subsequent refinements of FPL's analysis based, in
14 part, on inputs provided by El Paso, result in this cost differential increasing
15 from \$58 million to \$83 million.

16
17 Group B consists of FPL's Martin Unit 8, 789 MW, a 200 MW system
18 purchase from Bidder W, and a 250 MW purchase from a new Bidder X
19 combined cycle unit in 2005, plus a purchase of approximately 700 MW from
20 one of two proposed El Paso combined cycle units in 2006. There are six plans
21 that consist of some combination of these four options, with varying contract
22 terms, costs, and locations. I chose the lowest cost plan from this Group B for
23 comparison. This Group B portfolio had a cost of \$59 million more than that

1 of the All-FPL self build plan. Subsequent refinements of FPL's analysis based,
2 in part, on inputs provided by El Paso, result in this cost differential increasing
3 from \$59 million to \$87 million.

4
5 Group C consists of FPL's Martin Unit 8, 789 MW, and a 506 MW purchase
6 from a new Bidder Y combined cycle unit in 2005, plus a purchase of
7 approximately 700 MW from one of two proposed El Paso combined cycle
8 units in 2006. There are four plans that consist of some combination of these
9 three options, with varying costs and locations. I chose the lowest cost plan
10 from this Group C for comparison. This Group C plan had a cost of \$87
11 million more than that of the All-FPL self build plan. Subsequent refinements
12 of FPL's analysis based, in part, on inputs provided by El Paso, result in this
13 cost differential increasing from \$87 million to \$122 million.

14
15 Group D consists of FPL's Martin Unit 8, 789 MW, a 200 MW system
16 purchase from Bidder W, a 50 MW system purchase from FPC, and a 250 MW
17 purchase from a new Bidder X combined cycle unit in 2005, plus a purchase of
18 approximately 700 MW from one of two proposed El Paso combined cycle
19 units in 2006. There are two alternative plans that consist of some combination
20 of these five options, with varying costs and locations. I chose the lowest cost
21 plan from this Group D for comparison. This Group D plan had a cost of \$104
22 million more than that of All-FPL self build plan. Subsequent refinements of

1 FPL's analysis based, in part, on inputs provided by El Paso, result in this cost
2 differential increasing from \$104 million to \$141 million.

3
4 Group E consists of FPL Martin Unit 8, 789 MW, and a 506 MW purchase
5 from a new Bidder Z combined cycle unit in 2005, plus a 708 MW, purchase
6 from a new El Paso combined cycle unit in 2006. There are three plans that
7 consist of some combination of these options, with various contract terms. I
8 chose the lowest cost plan from this Group E for comparison. This Group E
9 plan had a cost of \$145 million more than that of the All-FPL self build plan.
10 Subsequent refinements of FPL's analysis based, in part, on inputs provided by
11 El Paso, result in this cost differential increasing from \$145 million to \$182
12 million.

13
14 **Q. What entities were ultimately named to the short list?**

15 A. The short list consisted of FPC and El Paso, the entities offering the options
16 that comprised the Group A plan I previously discussed. As I stated above, one
17 of El Paso's proposals was part of every marginally competitive plan. FPC's
18 proposal was also included in an alternative plan that included FPL's Manatee
19 Unit 3 in 2005 and Martin Unit 8 in 2006.

20
21 **Q. Upon what bases was the short list determined?**

22 A. The primary factors that led to the determination of the short list are as follows:
23

1 First, it was clear that (1) all of the plans in these Groups were much more
2 costly than the All-FPL self build plan; (2) the plans in Groups C, D and E
3 were much more costly than some of the plans of Groups A and B; and (3)
4 none of the plans would have been even remotely competitive with the All-
5 FPL self build plan but for the fact that they included one of the two El Paso
6 options in 2006.

7
8 These two El Paso bids were particularly competitive, and without those bids
9 no plan was close to the All-FPL self build plan (other than one plan that
10 included both FPL units and a short-term utility system purchase). Specifically,
11 without El Paso, the only plan within \$200 million of the All-FPL self build
12 plan included both FPL's Manatee Unit 3 in 2005 and FPL's Martin Unit 8 in
13 2006, plus a short-term 50 MW system purchase from FPC in 2005 to allow
14 FPL to achieve its reserve margin target. Thus, El Paso was the driver in all of
15 the top economic plans other than those that included both FPL units.
16 Consequently, it was clear that El Paso should be on the short list. Moreover, if
17 an agreement with a reduced price could not be reached with El Paso, there
18 was no point in negotiating with any of the other bidders.

19
20 Also, the significantly higher cost of the plans in Groups C, D and E compared
21 to those in Groups A and B, and to the All-FPL self build plan eliminated them
22 from further consideration.

23

1 Second, FPL had concerns about two of the proposals in Group B (and also
2 Group D). Both proposals were necessary for that plan to meet FPL's reserve
3 margin requirements. So, the loss of either proposal would make the plans
4 reflected in Group B (and Group D) insufficient. FPL had a concern with the
5 Bidder W proposal related to whether it could deliver 200 MW of capacity to
6 FPL in 2005 through 2011, and still achieve it's own 20% reserve margin. FPL
7 had separate serious concerns with Bidder X that would independently
8 disqualify Groups B and D. As Mr. Dewhurst testifies, Bidder X's bond rating
9 was rated below investment grade. This raised serious concerns about Bidder
10 X's financial viability and its ability to finance, construct, operate and maintain
11 its proposed facility.

12
13 Third, it made sense to focus FPL's efforts on negotiation with the entities
14 offering the plan that was economically closest to the All-FPL self build plan.
15 Based on the results of FPL's economic analysis, as well as those of the
16 independent analysis performed by Mr. Taylor, even the plans in Groups A or
17 B were not economically competitive with the All-FPL self build plan. They
18 are all at least \$58 million more expensive than the All-FPL self build plan,
19 and were all more costly than another plan that included both FPL plants and a
20 50 MW utility system purchase. With the All-FPL self build plan clearly the
21 economically superior plan, FPL focused its negotiating resources on the
22 entities and plans that held the most promise as an alternative to the All-FPL
23 self build plan, especially since the negotiations were likely to be very

1 challenging, given the economic improvements those entities would have to
2 make to achieve a lower cost than the All-FPL self build plan.

3
4 Therefore, on June 19, 2002, FPL contacted the bidders regarding their status
5 and announced its short list of FPC and El Paso (i.e. Group A).

6

7 **Q. Please summarize what FPL communicated to the short list bidders.**

8 A. FPL initially contacted both the short list bidders on June 19, indicating that
9 they had made the short list for negotiations and that follow-up
10 communications would be sent shortly.

11

12 On June 19, FPL sent a letter to El Paso, inviting El Paso to lower its price,
13 forwarding a draft purchased power agreement (“PPA”) and proposing a round
14 of face-to-face negotiations on June 27 and, if appropriate, June 28. On June
15 20, FPL forwarded to El Paso a series of questions regarding El Paso's bids. On
16 June 21, FPL informed El Paso that El Paso's bids were part of plans that were
17 not the most cost-effective alternatives available to FPL. FPL requested that
18 prior to June 27 El Paso provide the responses to the questions, any reactions to
19 the PPA and any bid price reduction. On June 21, FPL asked El Paso if it
20 would agree to have Commission Staff observe the negotiations session; El
21 Paso indicated its agreement, and FPL extended an invitation to the Staff to
22 observe the negotiations.

23

1 On June 25, FPL again informed El Paso that El Paso's bids were part of plans
2 that were not the most cost-effective alternatives available to FPL, again
3 requested that El Paso consider reducing the price of its bids, and extended to
4 Monday, July 1, the deadline for any price reduction.

5
6 On June 21, FPL also sent a letter to FPC advising FPC that it was part of a
7 plan that was not the most cost-effective alternatives available to FPL, and
8 providing FPC with the opportunity to refine its pricing by a date certain. FPC
9 responded on June 25, indicating that FPC would not reduce its bid price.

10
11 On June 27, FPL met with representatives of El Paso, with Commission Staff
12 in attendance.

13
14 **Q. Please summarize the key relevant information provided by El Paso**
15 **during your meeting of June 27, and subsequently via fax on July 1.**

16 **A.** During the day of discussions, in response to FPL's inquiries regarding the
17 aspects of its proposals that El Paso would be willing to contractually
18 guarantee, El Paso explained the following:

19
20 First, El Paso indicated that for both of its bids, the heat rates that had been
21 provided by El Paso were the "best" heat rates that could be achieved by the
22 proposed units, not the average heat rates that the units would achieve over
23 time, as FPL assumed for all alternatives in the evaluation process. El Paso

1 further communicated that the average heat rate that FPL should use to
2 evaluate El Paso's two bids was 3% higher than the "optimal" heat rate El Paso
3 had originally submitted in its bids. This was subsequently revised by El Paso
4 (via fax) to be 1% higher than the "optimal" heat rate. This meant that all
5 energy produced at El Paso's proposed facilities would be 1% more costly than
6 had been evaluated by FPL and Mr. Taylor.

7
8 Second, El Paso indicated that although it had not stated it in its bids, it
9 intended its bids to be "tolling agreements," where FPL would acquire and
10 deliver the natural gas required to operate the proposed El Paso units. El Paso
11 had asked FPL to evaluate El Paso's proposal at the Belle Glade site assuming
12 that gas would be delivered through the Gulfstream pipeline. However, it is
13 not known when the Gulfstream pipeline would be extended to reach the Belle
14 Glade site.

15
16 El Paso indicated that until the Gulfstream pipeline was actually extended to
17 reach the Belle Glade site, gas could be transported through the FGT pipeline
18 to the NUI pipeline (a local distribution company), and then delivered through
19 the NUI pipeline to the Belle Glade plant. Aside from the cost of transporting
20 gas through the FGT pipeline to the NUI pipeline, El Paso indicated that NUI
21 would impose additional charges to deliver the gas through its own pipeline.
22 This meant that given the higher cost of gas transportation through the FGT
23 pipeline, compared to the Gulfstream pipeline, and adding the NUI cost,

1 beginning on the in-service date of the Belle Glade unit, all gas used at El
2 Paso's Belle Glade facility would be more costly than had been evaluated by
3 FPL and Mr. Taylor.

4
5 Moreover, it is not clear when Gulfstream would extend its pipeline to reach
6 the Belle Glade plant, or how long a contractual commitment FGT and NUI
7 would require FPL to make, paying the higher transportation rate, in order for
8 FGT and NUI to make the pipeline enhancements that would be necessary to
9 deliver sufficient gas to the Belle Glade facility at the required pressure.

10
11 Third, El Paso indicated that, although in its bids it had asked FPL to assume
12 that its proposed units would operate at approximately 93.6% availability, on
13 average, El Paso's proposal in fact was a "unit contingent" energy proposal,
14 where FPL would control and dispatch the unit when and if the unit is
15 available, but that El Paso's proposal did not guarantee any specific level of
16 availability. El Paso indicated that a proposal that would offer a performance
17 guarantee on availability would be more costly.

18
19 Fourth, El Paso indicated that its bid was very aggressive and hence it would
20 not further reduce its bid prices. In fact, no price change was received by the
21 extended July 1 deadline.

22

1 **Q. Please summarize FPL's actions to reflect, in its evaluation, the**
2 **information provided by El Paso on June 27, and subsequently via fax on**
3 **July 1, and the results of those actions.**

4 A. FPL reflected in its economic analysis for Groups A through E described above
5 a 1% increase in the heat rate of each of the two El Paso proposed units and an
6 increase in the cost of natural gas delivered to El Paso's Belle Glade unit for the
7 first two years of the proposed 25-year contract (a very conservative
8 assumption regarding the term of the commitment that FGT and NUI are likely
9 to demand prior to making the necessary pipeline improvements to provide this
10 service). El Paso's clarifications increased the cost of the plans in Groups A
11 through E that included El Paso's Belle Glade proposal by approximately \$24
12 million (CPVRR). The cost increase for the best plans in Groups A through E
13 that included El Paso's Manatee proposal is approximately \$11 million.

14
15 **Q. Did FPL make any adjustments in the economic evaluation due to the**
16 **clarification by El Paso that its proposals were for "unit contingent"**
17 **energy?**

18 A. No. Without making any additional adjustments related to the "unit
19 contingent" nature of El Paso's proposal, FPL's economic analysis already
20 concluded that the best alternative plan to the All FPL option is \$83 million
21 more costly than the All-FPL self build plan. Therefore, it was not necessary
22 to make further adjustments. However, it should be noted that in negotiations

1 El Paso stated that if it provided a more firm proposal, its bid would have been
2 higher.

3

4 **Q. Aside from the adjustments applied to the best plans in Groups A**
5 **through E, related to the heat rate and gas transportation cost**
6 **clarifications provided by El Paso, did FPL make other adjustments to its**
7 **economic analysis after the June 18 meeting with FPL management?**

8 A. Yes. As explained by Dr. Sim, adjustments were made to reflect the fact that
9 if only one of FPL's units is built in a plan, the cost of building that single FPL
10 unit is approximately \$15 million greater (CPVRR) than when built in
11 conjunction with the other FPL unit. Small adjustments (approximately \$1
12 million) were also made to the transmission integration costs in some of the
13 plans. All adjustments are reflected in the results provided in Document RS-7.
14 As this Document shows, the most competitive of all the plans that do not
15 include both of FPL's generating units exceed the cost of the All-FPL self
16 build plan by at least \$83 million.

17

18 **V. Other Factors Considered in Resource Selection**

19

20 **Q. What other factors influence FPL's selection of a generating alternative?**

21 A. FPL considers a number of other factors in the selection of generating
22 alternatives, including:

23 - Financial viability of the supplier;

- 1 - Extent of contractual commitment of supplier;
- 2 - Feasibility of licensing and construction plans;
- 3 - Delivery risk related to firmness of fuel supply, construction
- 4 schedule, and experience of the seller;
- 5 - Degree of control to be exercised by FPL, including items such
- 6 as dispatchability, and FPL's rights to sell power;
- 7 - Fuel diversity impact of the various alternatives;
- 8 - Technology risk; and
- 9 - Environmental risk.

10

11 **Q. Please describe how these factors may be applied.**

12 A. These factors can cause some proposals to be eliminated from consideration
13 because of their negative impact on system reliability and costs to customers.
14 The factors may also be used to raise one alternative above another that, on
15 the surface, may seem to provide a better economic result.

16

17 For example, if a supplier's financial viability is not strong, it may not be
18 financially capable of performing its primary obligations under a purchase
19 power contract, including the timely construction and completion of the unit
20 and the reliable long-term operation of the resource, thus adversely affecting
21 system reliability. Mr. Dewhurst addresses this issue in his testimony.

22

1 “Contractual commitment of a supplier” refers to the relative ability and
2 willingness of a supplier to make a substantial contractual commitment that
3 gives adequate assurance to FPL of its intention to perform reliably. Absent a
4 strong contractual commitment, a supplier may find it easier to renege on its
5 obligations to FPL and FPL's customers if performance difficulties arise.
6 Consequently, FPL will require a certain level of financial viability and a
7 certain level of contractual commitment before it enters into a purchase power
8 contract.

9
10 “Feasibility of licensing and construction plans” relates to the relative degree
11 of difficulty that the overall licensing process could have on a generation
12 resource and the impact that the process could have on the construction of the
13 resource.

14
15 “Delivery risk related to firmness of fuel supply, construction schedule, and
16 experience of seller,” addresses the relative risk associated with (1) projects
17 that include firm gas supply and transportation contracts, which would have
18 less delivery risk than those that do not, or (2) projects whose technology
19 dictates a longer construction process, with greater opportunities for delay,
20 such as a nuclear plant, which would be disadvantaged when compared to one
21 with a less involved construction process, such as a combined cycle unit, or
22 (3) projects in which the seller demonstrates that it has ample experience with
23 the same type, brand and size of equipment, labor markets, and operating

1 conditions, which would be advantages, compared to those where they do not
2 have similar experience, and (4) the experience of the bidder with which FPL
3 is familiar.

4
5 “Degree of control that can be exercised by FPL, including dispatchability and
6 FPL's right to sell power” from the resource into the wholesale market (which
7 results in fuel credits to its customers), relates to how effectively a proposal
8 allows FPL to have the resource operated and maintained in the same manner
9 as FPL dispatches, operates and maintains its own units to maximize the
10 benefit to the customer.

11
12 “Fuel diversity” is a way of mitigating the risk that one event or market
13 condition related to a single fuel could adversely affect the availability or cost
14 of all or a large portion of electricity produced or purchased by FPL. There is
15 no definite guideline as to how much energy any single fuel source should
16 provide, but in choosing between, for example, a new coal generating unit and
17 a new gas generating unit to augment the capacity of the existing system, if
18 the existing system currently uses much more gas than coal, the new coal unit
19 would have an advantage based on its greater contribution to fuel diversity.
20 Similarly, purchasing system power from a diversified system or from a
21 system that uses fuel types that are different from those used by the purchaser
22 adds to fuel diversity.

23

1 Another aspect of fuel diversity concerns the degree to which risk can be
2 mitigated by obtaining the same fuel type (e.g., gas) from different
3 geographical sources, and/or delivering it through different delivery systems.
4 An example of this might be in the comparison of two gas-fired options, one
5 fed from an existing gas pipeline, from which gas is delivered to the existing
6 system, and the other fed from a separate gas pipeline. The alternative fed
7 through the separate pipeline would be considered a better contributor to fuel
8 diversity because some events that affect the first pipeline that feeds the
9 existing system would not affect the new gas-fired option which is fed through
10 a different pipeline.

11
12 “Technology risk” is based, in part, on an assessment of the relative maturity
13 of a technology. For example, an alternative based on a new gas turbine still
14 in the prototype stage might be considered a greater risk than a more
15 commercially developed technology. Also, the lower the degree of experience
16 that a particular supplier has in constructing, operating and maintaining a
17 certain combination of equipment, or in a certain operating pattern (e.g.,
18 cycling up and down), the greater the susceptibility of that supplier's proposal
19 to technology risk. This risk can be manifested in a generating unit's inability
20 to maintain the required high level of availability to satisfy FPL customers'
21 needs.

1 “Environmental risk” is a recognition that some technologies, coal and nuclear
2 for example, may face a higher hurdle in licensing, and run a greater risk of
3 future tightening of controls than a gas option.

4
5 These factors should be considered in the selection of a generating alternative,
6 to the extent it is relevant and meaningful to do so.

7
8 **Q. Did FPL consider any of these factors in the evaluation of proposals**
9 **submitted in response to the Supplemental RFP?**

10 A. Yes. Consideration of two of these factors, financial viability and prior
11 experienced bidder, led to the elimination of two bidders. The other factors
12 discussed below would not change the outcome of the economic analysis;
13 rather, they serve to reinforce FPL’s conclusion that the All-FPL self build
14 plan is the best option to meet the needs of its customers.

15
16 **Q. Please address the first factor, which is financial viability of the bidder.**

17 A. The recent collapse in the credit rating of a number of energy companies has
18 brought much more attention to this issue. However, this has always been a
19 concern to FPL, because the long-term financial viability of any purchased
20 power project needs to be confirmed up front, and then maintained during the
21 term of the contract, to ensure that FPL’s customers would receive the
22 benefits associated with both the timely initial delivery of capacity and energy
23 from the generating unit that would be the subject of such a contract, and the

1 reliable performance of that unit throughout the life of the contract. Any
2 delay in startup or subsequent degradation in performance, whether related to
3 financial viability or not, jeopardizes the ability of FPL to provide an
4 adequate, economic supply of electricity to its customers.

5
6 Therefore, FPL must evaluate, at least qualitatively, whether a supplier can
7 avoid financial problems, and further, whether the supplier would be willing
8 and able to complete construction and continue effective operation and
9 maintenance of the proposed generating facility, even if the supplier were to
10 experience financial setbacks.

11
12 On the basis of financial viability, a qualitative comparison of the proposals
13 received in response to the Supplemental RFP favors FPL's self-build options,
14 along with power purchases from other utilities, because FPL's credit rating
15 and those of other utilities are significantly higher than those of the non-utility
16 bidders. Moreover, even where a developer's current credit ratings meet FPL's
17 minimum requirement, power purchases from the independent power
18 producer (IPP) could rate lower due to concerns over the future financial state
19 of the supplier in question or its corporate parent. Moreover, it is unclear
20 whether the corporate parent of such an IPP will continue to include power
21 generation as a key component of its future corporate strategy. To the extent
22 that the corporate strategy does not expressly include power generation, there

1 is greater uncertainty regarding that supplier's commitment to overcome
2 problems during construction, operation and maintenance.

3
4 Given the general effect of recent energy market developments on
5 independent power producers, in general, it is logical to conclude that a
6 contractual commitment to buy power from IPPs would present much greater
7 risk to FPL's customers than would FPL's self-build options. Mr. Dewhurst
8 addresses more specifically the recent market reaction to IPPs and the
9 increased financial challenges they face.

10
11 **Q. Please address the factor - "Feasibility of Licensing and Construction**
12 **Requirements."**

13 A. FPL's self-build option requires licensing under the Power Plant Siting Act,
14 including a Determination of Need from the Commission and a Site
15 Certification from the Governor and Cabinet of the State of Florida sitting as
16 the Siting Board, after the Florida Department of Environmental Protection
17 (FDEP) has processed FPL's application. All plans resulting from the
18 Supplemental RFP similarly would require this licensing for both the FPL unit
19 and the combined cycle unit(s) proposed by bidders. And although power
20 purchases from existing plants operated by other utilities require no licensing,
21 just FERC approval, these types of proposals were small in size and could
22 only be considered in combination with both an FPL unit and a non-FPL unit,

1 both of which require licensing under the PPSA. Therefore, all portfolio plans
2 require PPSA action.

3
4 The fact that FPL proposes expanding existing sites instead of developing new
5 "greenfield" sites, along with FPL's experience in permitting and constructing
6 plants in Florida gives FPL an advantage in terms of the feasibility of
7 environmental licensing and construction requirements.

8
9 **Q. Please address the relative risks related to firmness of fuel supply,
10 construction schedule and experience of the seller.**

11 A. Generation strategies that include firm gas transportation and secure sources
12 of supply for the gas commodity are favored over those that do not. FPL's
13 self-build projects will be supported by contracts for firm gas transportation
14 and supply to ensure that the total firm gas requirements of FPL's system,
15 including the needs of these new FPL units, are met. Other portfolios that do
16 not include firm fuel transportation arrangements are inherently more risky in
17 terms of reliability.

18
19 Since it was not clear in most bids to what extent the bidders' fuel supply and
20 transportation needs would be met through firm contracts, bidders were not
21 penalized during the evaluation. This is the kind of issue that was to be
22 explored during negotiations. However, given the fact that FPL does plan to

1 meet its firm fuel needs through firm fuel supply and transportation contracts,
2 it is clear that no bidder would have an advantage over FPL in this category.
3 Construction schedule relates to the likelihood that a proposal can meet the
4 desired in-service date. To the extent that this issue relates to technology, it
5 would not be relevant in FPL's Supplemental RFP process, since all proposals
6 were either combined cycle or combustion turbines, as were FPL's own units.
7 However, even with a common technology among all new plant proposals,
8 given the extensive experience that FPL has in permitting, building and
9 operating combined cycle units in Florida, the All-FPL self build plan has an
10 advantage in this category.

11
12 An assessment of the level of experience of the entity proposing to construct
13 and operate the resource, which considered the number of similar projects
14 which the supplier has constructed and is currently operating, would favor
15 FPL. FPL is proposing to build units that are the same as existing units it
16 operates, using the same equipment.

17
18 **Q. Please address the factor - "Degree of Control."**

19 **A.** Ultimately, the degree to which this would differentiate the All-FPL self build
20 plan from power purchase alternatives would be determined by a negotiated
21 contract. However, it is very difficult to duplicate ownership rights in a
22 negotiated contract between parties with disparate and often opposing
23 objectives.

1 As the owner of a generating unit, FPL has complete control over the level of
2 output of the unit at any point in time, including shutting down the unit or
3 turning it on, within the engineering limits of the unit. FPL also completely
4 controls maintenance scheduling for the unit and has the right to sell power
5 from the unit in the wholesale market when the power is not needed to serve
6 FPL's retail customers, with the benefit of those sales accruing to the
7 customer. In purchasing power, FPL attempts to duplicate these rights by
8 contract. However, the degree of control FPL can exercise under a contract is
9 never as complete as it is for a unit FPL owns and operates. In light of FPL's
10 outstanding performance record in operating its generating plants, having as
11 much control as possible over the generating resources is in the customers'
12 best interests.

13
14 **Q. Why can't FPL duplicate through a contract the rights it has through**
15 **ownership?**

16 A. Such a contract would have to specify clearly when a unit could be turned on
17 or off, up or down, during the entire term of the contract. Addressing
18 explicitly in a contract every conceivable combination of fuel prices and
19 availability, operating capability (which can change due to many factors,
20 including ambient temperature), maintenance requirements, customer demand,
21 etc., would be extremely difficult if not impossible. In addition, where a
22 difference of opinion exists with respect to the terms of a purchased power
23 contract, exercising control rights that FPL believes to exist may require

1 litigation. It has resulted in litigation in the past. This represents a risk to
2 customers that is not present with self-build options.

3

4 **Q. Is fuel diversity a significant factor that helps create differentiation**
5 **among the various bids in the Supplemental RFP?**

6 A. No, not to a significant extent; however, to the extent it does, it gives an
7 advantage to the All-FPL self build plan over other new construction
8 alternatives. In this Supplemental RFP, all of the alternatives considered
9 would be fueled by natural gas or are utility system sales. Thus, the system
10 fuel price response to changes in any single fuel price would be relatively
11 similar in all cases. Regarding the mitigation of risk introduced by having
12 access to separate pipelines, because FPL will be connected to both the
13 Gulfstream and FGT pipelines, the All-FPL self build plan provides as much
14 mitigation against fuel risk as the best new construction options. Only the
15 proposed utility system sales offer greater fuel diversification.

16

17 **Q. Can the FPL and non-FPL alternatives be distinguished based on**
18 **technology risk as you have presented it?**

19 A. Yes, to some extent. Some of the bids, all of which utilize CTs, have proposed
20 the use of a specific model/brand of CT with which they have not reported
21 having any prior experience. This raises concerns regarding these bidders'
22 ability to operate and maintain the equipment in a manner consistent with the
23 high level of availability reflected in the proposals. As explained by Mr.

1 Yeager, the All-FPL self build plan, on the other hand, consists of a
2 standardized plant design, using the same type equipment with which FPL has
3 had extensive experience. This makes the technology risk of the All-FPL self
4 build plan less than that of bidders employing CTs that are new to them.

5

6 **Q. Is environmental risk different for FPL than for non-FPL alternatives?**

7 A. Yes. Although all bids were based on natural gas as a fuel source, there is
8 little difference in environmental risk; however, there are obvious
9 environmental and permitting advantages to adding capacity to a “brownfield”
10 site, i.e., a site with existing generation - as proposed by FPL versus
11 development of a new “greenfield” site, as proposed by most other bidders.

12

13 **Q. Did the qualitative factors that you have discussed influence FPL’s**
14 **decision to pursue the Manatee and Martin projects?**

15 A. Yes. Consideration of the qualitative factors reaffirmed FPL’s finding that its
16 self-build option is the best strategy for our customers. As discussed above,
17 both FPL's economic analysis and that performed independently by Mr.
18 Taylor concluded that FPL's self-build plan is the clear economic winner.
19 Accordingly, there would have to have been clear and significant qualitative
20 advantages associated with one or more of the other alternatives to offset the
21 economic advantages that FPL's self-build plan provides. Most of these
22 qualitative factors favor the All-FPL self build plan to a greater or lesser
23 degree over other alternatives and none would make an alternative plan

1 superior to the All-FPL self build plan. Consequently, since the qualitative
2 considerations I have listed above reinforce the results of FPL's quantitative
3 analysis, it is clear that FPL's self-build option is by far the best strategy for
4 FPL's customers.

5
6 **Q. Couldn't the argument be made that signing a contract with an**
7 **independent power producer is less risky than "saddling" the customers**
8 **with a long-term obligation in rate base?**

9 A. The argument is made by some, but it is specious. It ignores the fact that the
10 commitment made through the power purchase contract places as much or
11 more of a long-term obligation on the customers as does adding to rate base a
12 generating unit built by FPL. The fact is that a generating unit built by an IPP
13 under contract to FPL to meet FPL's customers' needs will be paid for by the
14 customers through the Capacity Cost Recovery Clause and the Fuel and
15 Energy Cost Recovery Clause. That recovery will be immediate upon delivery
16 and will raise those cost recovery costs. In contrast, customers do not face
17 increased rates for rate base additions until the utility seeks base rate relief.
18 Further it should be noted that FPL has added over \$13 billion in new plant
19 over the last seventeen years while actually decreasing rather than increasing
20 base rates. So, at worst customers will pay for the capacity and energy either
21 way.

22
23 **Q. Is FPL predisposed to build its own units rather than to buy power?**

1 A. No. FPL has a history that demonstrates its willingness to purchase power if
2 that is the most economic alternative to customers. In 1989, prior to
3 establishment of the Commission's bidding rule, FPL issued a request for
4 proposals. After an evaluation of the bids received in response to that request
5 for proposals, FPL selected an offer of a Unit Power Sale from the Southern
6 Company as the preferred alternative, with other projects identified as
7 secondary options. FPL's self-build option was not evaluated to be cost-
8 effective. FPL eventually purchased Scherer Unit No. 4 after discussions with
9 Georgia Power and presented the results of its RFP analysis to the
10 Commission in Docket No. 900796-EI.

11
12 In 1992, FPL returned to the Commission as a co-applicant in the Petition to
13 Determine Need for the Cypress Energy Partners, Ltd. Project, Docket Nos.
14 920520-EQ and 920648-EQ, which consisted of two 400 MW coal-fired units
15 located near Lake Okeechobee. Although the Commission ultimately found
16 that this project was not the most cost-effective alternative available to FPL,
17 the fact that in both cases FPL brought forward non-FPL options demonstrates
18 that there is no predisposition toward self-building.

19
20 In addition, as recently as 2001 FPL contracted with IPP's to make significant
21 short-term purchases during the period 2002-2007. If FPL had been
22 predisposed to build rather than buy, it could have built out at least part of that
23 capacity. Instead, it chose to purchase capacity.

1 **Q. Did FPL include an equity penalty and transmission integration costs**
2 **when it selected the Cypress Energy project?**

3 A. Yes. FPL included \$73 million of equity penalty and \$99 million of
4 transmission integration costs and still found the project to be cost-effective.

5
6 **Q. Won't units built by unregulated, "competitive" companies be cheaper**
7 **than units built by a regulated utility?**

8 A. The fact that FPL is regulated does not mean it is not price competitive.
9 Being regulated does not affect FPL's ability and willingness to compete on
10 price as well as quality and reliability. The ultimate proof of FPL's ability to
11 compete with unregulated companies is found in the results of FPL's
12 Supplemental RFP process. FPL invited the market to compete and the All-
13 FPL self-build plan remains the lowest cost, most reliable alternative.

14
15 **Q. Are there any other qualitative or quantitative factors that could be**
16 **considered in the comparison that FPL has done?**

17 A. Yes. The residual value of a generating unit is a quantitative factor and refers
18 to any remaining value in that unit after its useful or expected life has passed.
19 For example, the combined cycle units proposed by FPL have expected book
20 lives of 25 years. While this is the life used to calculate depreciation expense
21 for these units, it is reasonable to assume that they will operate beyond 25
22 years with reasonable upkeep. Therefore, they will continue to have value
23 beyond the end of their "book life."

1 **Q. Did FPL quantify the benefit of residual value of the All-FPL self build**
2 **plan?**

3 A. No. However, Mr. Taylor did. His calculation of residual value increased the
4 cost differential between the All-FPL self build plan and the next lowest cost
5 portfolio without both FPL units by more than \$30 million. FPL's analysis in
6 this Supplemental RFP has taken a conservative approach and did not attempt
7 to quantify residual value. However, it is reasonable to assume that there will
8 be some value left in FPL's generating units at the end of their depreciable
9 life. Thus, residual value is an additional factor that favors the All-FPL self
10 build plan.

11

12 **VI. Adverse Consequences of Delay**

13

14 **Q. Are there any adverse consequences to delaying approval of the Manatee**
15 **and Martin projects?**

16 A. Yes. Delaying approval could create a threat to system reliability, increase
17 system fuel cost and cause greater use of oil-fired generation

18

19 The threat to system reliability would come from FPL's inability to meet its
20 20% reserve margin target if one or both units failed to meet their proposed
21 June 2005 in-service dates. For example, if both units were delayed and
22 unavailable in the summers of 2005 and 2006, FPL's reserve margin would
23 fall to 14.1% and 11.1%, respectively. While falling to these levels of reserve

1 margin does not necessarily result in loss of service to any of FPL's
2 customers, lower reserve margins certainly increase the possibility of outages
3 and increase the probability of load control operations.

4
5 Increased system fuel costs would result from any delayed in-service date of
6 the proposed combined cycle units. These units will be highly efficient, state-
7 of-the-art generating units which would displace energy from older, less
8 efficient units. In addition, as shown in Document RS-8 the addition of these
9 units will result in a significant reduction in the projected average heat rate of
10 FPL's fossil units, from 8,402 kwh/MMBtu in 2004, to 8,095 kwh/MMBtu in
11 2006, a reduction of more than 3.6%. This means that fuel expense during the
12 second half of 2005 and in 2006 will be significantly lower than it would be
13 without Manatee Unit 3 and Martin Unit 8. The absence of the new gas-fired
14 units will result in increased operation of FPL's older units, which generally
15 are oil-fired, leading to increased oil use.

16
17 **VIII. Summary**

18
19 **Q. Please summarize your testimony.**

20 A. The Manatee Unit 3 and Martin Unit 8 projects proposed by FPL are by far
21 the most cost-effective alternatives to meet the capacity and energy needs of
22 FPL's customers in 2005, 2006 and beyond. These projects are needed to
23 maintain system reliability in 2005 and 2006 as measured by FPL's 20%

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

reserve margin criterion. They will provide FPL's customers with an adequate supply of electricity at a reasonable cost.

The Manatee and Martin projects offer a clear economic advantage over the best of the alternative plans resulting from the Supplemental RFP, as well as a number of other important non-economic advantages, including the following:

- They have potential access to more than one pipeline, resulting in greater reliability of fuel supply than competing proposals.
- Ownership offers greater operational flexibility and control over the generation resource than purchased power for the benefit of FPL's customers, and eliminates any litigation potential related to power purchase contracts.
- Ownership also presents less financial risk than purchased power from entities that may become financially stressed in the post-Enron era.
- There is a residual value for FPL's customers in units owned by FPL versus units under contract.

1 FPL's proposed Manatee Unit 3 and Martin Unit 8 projects meet all of the
2 criteria required by the Commission and should be granted a Determination of
3 Need.

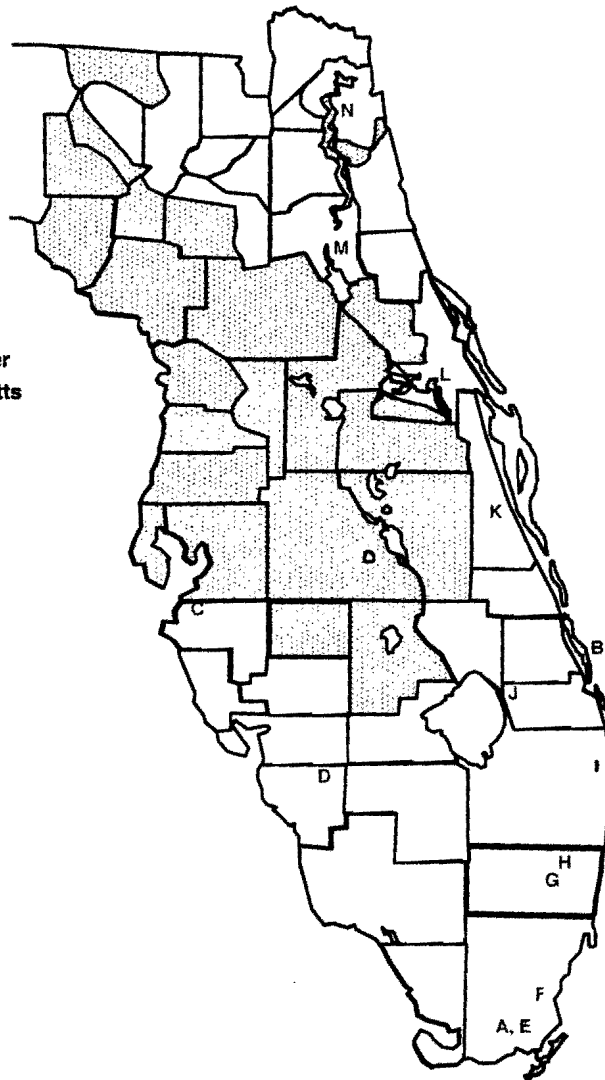
4

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

6 **A. Yes.**

FPL's Generating Resources (Projected Summer 2002 Capabilities)

 Non-FPL Territory



	Fuel Type	Summer Megawatts
A. Turkey Point	Nuclear	1,386
B. St. Lucie *	Nuclear	1,553
C. Manatee	Oil/ Gas	1,625
D. Ft. Myers	Gas	1,473
E. Turkey Point	Oil/Gas	810
F. Cutler	Gas	215
G. Lauderdale	Oil/Gas	854
H. Port Everglades	Oil/Gas	1,242
I. Riviera	Oil/Gas	573
J. Martin	Gas/Oil	2,906
K. Cape Canaveral	Oil/Gas	806
L. Sanford	Oil/Gas	1,099
M. Putnam	Oil/Gas	498
N. St. Johns River*	Coal	254
Scherer **	Coal	658
Peaking Units	Gas	1,908
FPL GENERATION TOTAL MW		17,860

* Represents FPL's ownership share: St. Lucie nuclear: 100% unit 1, 85% unit 2; St. Johns River: 20% of two units.

** The Scherer unit is located in Georgia and is not shown on this map.

<i>FPL's Purchased Power MW*</i>								
<i>Year</i>	<i>UPS</i>		<i>SJRPP</i>		<i>Other Firm Capacity Purchases</i>		<i>Total</i>	
	<i>Winter</i>	<i>Summer</i>	<i>Winter</i>	<i>Summer</i>	<i>Winter</i>	<i>Summer</i>	<i>Winter</i>	<i>Summer</i>
2002	928	928	389	382	50	1093	1367	2403
2003	928	928	389	382	774	1164	2091	2474
2004	928	928	389	382	813	1164	2130	2474
2005	928	928	389	382	1303	447	2620	1757
2006	928	928	389	382	540	447	1857	1757
2007	928	928	389	382	540	0	1857	1310
2008	928	928	389	382	0	0	1317	1310
2009	928	928	389	382	0	0	1317	1310
2010	928	0	389	382	0	0	1317	382
2011	0	0	389	382	0	0	389	382

*Note: The "Other Firm Capacity Purchases" include 220 MW from a purchase based on a construction project that is currently on hold and which FPL believes will not be completed on schedule, if at all. Although this delay/cancellation will lower this purchase amount for 2003 and 2004, it does not affect FPL's capacity needs in 2005 or 2006 because the purchase was scheduled to end in May 2005.

Florida Power & Light Company					
Firm Capacity and Energy Contracts with					
Cogeneration/Small Power Production Facilities					
<i>Project</i>	<i>County</i>	<i>Fuel</i>	<i>MW Capacity</i>	<i>In-Service Date</i>	<i>End Date</i>
Bio-Energy	Broward	Landfill Gas	10.0	5/1/98	1/1/05
Broward South	Broward	Solid Waste	50.6	4/1/91	8/1/09
			1.4	1/1/93	12/31/26
			1.5	1/1/95	12/31/26
			0.6	1/1/97	12/31/26
Broward North	Broward	Solid Waste	45.0	4/1/92	12/31/10
			7.0	1/1/93	12/31/26
			1.5	1/1/95	12/31/26
			2.5	1/1/97	12/31/26
Cedar Bay Generating Co.	Duval	Coal (CFB)	250.0	1/25/94	12/31/24
Indiantown Cogen., LP	Martin	Coal (PC)	330.0	12/22/95	12/1/25
Palm Beach SWA	Palm Beach	Solid Waste	43.5	4/1/92	3/31/10
Florida Crushed Stone	Hernando	Coal (PC)	110.0	4/1/92	10/31/05
			11.0	1/1/94	10/31/05
			12.0	1/1/95	10/31/05

List of Organizations Submitting Outside Proposals

	<u>Organization</u>	<u>Type of Proposal</u>	<u>Technology</u>
1)	ABB Equity Ventures	Purchased Power	CC
2)	AES	Purchased Power	CC & CT
3)	Bright Star (Enron)	Purchased Power & Turnkey	CC
4)	Calpine	Purchased Power & Turnkey	CC
5)	Cogentrix	New Resource	CC
6)	Competitive Power Ventures	Purchased Power & Turnkey	CC
7)	Constellation	Purchased Power	CC
8)	Dynegy	Purchase Power	CC & CT
9)	El Paso	Purchased Power & Turnkey	CC
10)	Florida Power Corporation	System Sale	Utility System
11)	Mirant	Purchased Power	CC
12)	PG&E NEG	Purchased Power	CC
13)	Sempra	Purchased Power	CC
14)	Southern Company	Purchased Power	CC
15)	TECO	System Sale	Utility System
16)	Tractabel	Purchased Power	CC

Summary of Eligible Outside Proposals

Outside Proposal Code Number	Location (County)	Incremental Summer Capacity (MW)	Start Date (Year)	Term of Service (No. of Years)
P1	Northwest Hardee	800	2005	15
P2	Northwest Hardee	800	2006	15
P3	Company System	200	2005	7
P4	Company System	200	2006	6
P5	Company System	50	2005	3
P6	Company System	50	2005	5
P19	Company System	200	2003	9
P20	St. Lucie	608	2005	15
P21	St. Lucie	1216	2005	15
P24	Indian River	250	2005	10
P25	Indian River	250	2005	15
P26	Indian River	250	2005	25
P27	Indian River	611	2006	10
P28	Indian River	611	2006	15
P29	Indian River	611	2006	25
P30	Indian River	611	2006	Turnkey
P31	Okeechobee	506	2005	10
P32	Okeechobee	506	2005	20
P33	Palm Beach	550	2006	25
P37	Palm Beach	567	2006	20
P39	Bradford	576	2005	10
P40a	Osceola	170	2005	9
P40b	Osceola	170	2005	1
P40c	Osceola	248	2006	8
P41a	Osceola	170	2005	26
P41b	Osceola	170	2005	1
P41c	Osceola	248	2006	25
P42	Palm Beach	708	2006	25
P43	Palm Beach	708	2006	Turnkey
P44	Manatee	699	2006	25
P45	Manatee	699	2006	Turnkey
P50	Manatee	230	2005	20
P51a	Manatee	230	2005	1
P51b	Manatee	730	2005	21
P52	Manatee	92	2006	Turnkey
P53	Muscogee (Georgia)	230	2005	25

Note: "Missing" outside proposal code numbers in the P1 through P 53 listing above are due to either those proposals being withdrawn by the Bidder or by that Bidder's proposals being ineligible for evaluation

CPVRR DIFFERENCE: ((ALL-FPL) - (FPL/NON-FPL COMBINATIONS))
(\$ MILLION)

GROUP	RANK	IN-SERVICE YEAR		CAPITAL & PRODUCTION COST	TRANSMISSION INTEGRATION COST	EQUITY PENALTY COST	TOTAL COST	COST DIFFERENCE vs. ALL-FPL
		2005	2006					
A	3,5,21	PMT / FPC 1107 / 50 MW	EP(BG) or (M) 708 MW	41,618	45	81	41,744	58
B	4,6,8,9,15,17	PMR / BIDDER W / BIDDER X 789 / 200 / 250 MW	EP(BG) or (M) 708 MW	41,603	40	102	41,745	59
C	11,14,27,30	PMR / BIDDER Y 789 / 506 MW	EP(BG) or (M) 708 MW	41,633	32	108	41,773	87
D	16,20	PMR / BIDDER W / BIDDER X / FPC 789 / 200 / 250 / 50 MW	EP(BG) or (M) 708 MW	41,620	31	139	41,790	104
E	22,24,29	PMR / BIDDER Z 789MW / 506MW	EP(BG) or (M) 708 MW	41,661	32	139	41,832	145

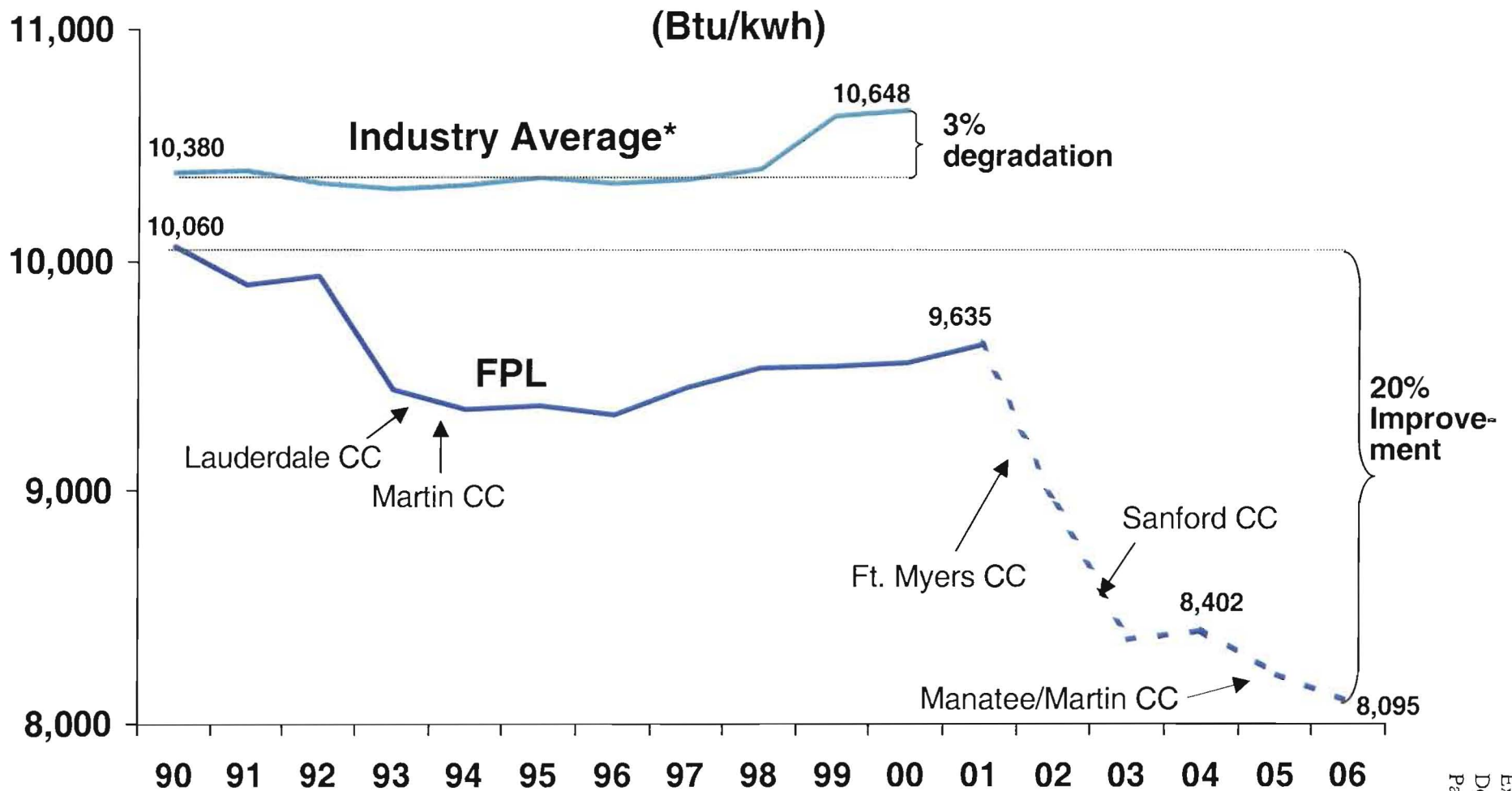
NOTE: DIFFERENCES REFLECT THE "BEST" OUTCOME FROM EACH GROUP

**CPVRR DIFFERENCE: ((ALL-FPL) - (FPL/NON-FPL COMBINATIONS))
(\$ MILLION)
REFLECTS INCREMENTAL COSTS OF BUILDING ONE FPL UNIT ONLY and EL PASO ADJUSTMENTS**

GROUP	RANK	IN-SERVICE YEAR		CAPITAL & PRODUCTION COST	TRANSMISSION INTEGRATION COST	EQUITY PENALTY COST	TOTAL COST	COST DIFFERENCE vs. ALL-FPL
		2005	2006					
A	3,4,21	PMT / FPC 1107 / 50 MW	EP(BG) or (M) 708 MW	41,644	45	81	41,770	83
B	5,7,10,12,17,19	PMR / BIDDER W / BIDDER X 789 / 200 / 250 MW	EP(BG) or (M) 700 MW	41,642	26	105	41,773	87
C	13,15,28,30	PMR / BIDDER Y 789 / 506 MW	EP(BG) or (M) 700 MW	41,671	26	111	41,808	122
D	18,20	PMR / BIDDER W / BIDDER X / FPC 789 / 200 / 250 / 50 MW	EP(BG) or (M) 700 MW	41,659	26	142	41,827	141
E	23,26,29	PMR / BIDDER Z 789MW / 506MW	EP(BG) or (M) 700 MW	41,700	26	142	41,868	182

NOTE: DIFFERENCES REFLECT THE "BEST" OUTCOME FROM EACH GROUP

Fossil System Net Heat Rate



*Source: RDI PowerDat (fossil industry average also includes non-regulated power plants starting in 1999)