

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Determination)
of Need of Hines Unit 2 Power)
Plant)
_____)

DOCKET NO. DD1064-EI

Submitted for filing: August 7, 2000

ORIGINAL

**CONFIDENTIAL DIRECT TESTIMONY
OF JOHN B. CRISP**

**ON BEHALF OF
FLORIDA POWER CORPORATION**

ROBERT A. GLENN
Director, Regulatory Counsel Group
FLORIDA POWER CORPORATION
P.O. Box 14042
St. Petersburg, Florida 33733
Telephone: (727) 820-5184
Facsimile: (727) 820-5519

GARY L. SASSO
Florida Bar No. 622575
Carlton, Fields, Ward,
Emmanuel, Smith & Cutler
Post Office Box 2861
St. Petersburg, FL 33731
Telephone: (727) 821-7000
Telecopier: (727) 822-3768

DOCUMENT NUMBER-DATE

09525 AUG-78

1000-1-1000/REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

**In re: Petition for Determination)
of Need of Hines Unit 2 Power)
Plant)
_____)**

DOCKET NO.

Submitted for filing: August 7, 2000

**EXHIBITS TO
CONFIDENTIAL
DIRECT TESTIMONY
OF JOHN B. CRISP**

**ON BEHALF OF
FLORIDA POWER CORPORATION**

ROBERT A. GLENN
Director, Regulatory Counsel Group
FLORIDA POWER CORPORATION
P.O. Box 14042
St. Petersburg, Florida 33733
Telephone: (727) 820-5184
Facsimile: (727) 820-5519

GARY L. SASSO
Florida Bar No. 622575
Carlton, Fields, Ward,
Emmanuel, Smith & Cutler
Post Office Box 2861
St. Petersburg, FL 33731
Telephone: (727) 821-7000
Telecopier: (727) 822-3768

1
2
3
4
5
6
7
8
9
10
11
12
13

[REDACTED]

Q. What conclusions did FPC reach on the basis of this evaluation?

A. FPC determined that the Hines 2 alternative was clearly superior on price- and non-price attributes to either the [REDACTED] or [REDACTED] proposal. After our thorough evaluation of both competing proposals, FPC decided to proceed with obtaining the necessary regulatory approvals to build Hines 2.

Q. Does this conclude your confidential testimony?

A. Yes, it does.

**IN RE: PETITION FOR DETERMINATION OF NEED
BY FLORIDA POWER CORPORATION
FPSC DOCKET NO. _____**

CONFIDENTIAL DIRECT TESTIMONY OF JOHN B. CRISP

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

I. INTRODUCTION AND BACKGROUND.

Q. Please state your name and business address.

A. My name is John B. Crisp, and my business address is Florida Power Corporation,
One Power Plaza, 263 13th Avenue, St. Petersburg, Florida 33701.

Q. By whom are you employed?

A. I am employed by Florida Power Corporation ("FPC" or the "Company"), as the
Director of Integrated Resource Planning and Load Forecasting.

Q. Are you filing non-confidential direct testimony in this proceeding?

A. Yes.

**Q. Have you described your duties as Director of Resource Planning and other
pertinent background information in that testimony?**

A. Yes, I have.

1 II. **PURPOSE AND SUMMARY OF TESTIMONY.**

2
3 **Q. What is the purpose of your confidential testimony in this proceeding?**

4 A. In response to the Company's Request for Proposals ("RFP"), we received proposals
5 from two bidders, (1) [REDACTED] and (2) [REDACTED]

6 [REDACTED]

7 [REDACTED] Both bidders
8 requested confidential treatment of the terms of their proposals. We evaluated both
9 proposals thoroughly, and we would like to describe these proposals and our
10 evaluation of them for the benefit of the Commission. In deference to the requests
11 for confidentiality by both of these bidders, however, we are referring to the bidders
12 simply as Bidder A and Bidder B, respectively, in our non-confidential testimony
13 and exhibits, and we do not describe the proposals or our evaluation of them in any
14 detail in our non-confidential submissions. That being the case, I am filing this
15 confidential testimony and supporting exhibits to describe the terms of the proposals
16 and our evaluation of them.

17
18 **Q. Are you sponsoring any confidential exhibits to your testimony?**

19 A. Yes. I am sponsoring the following confidential appendix items to the confidential
20 portion of our Need Study in this non-public portion of my testimony:
21

1

(Confidential) JBC-3, App. 1

[REDACTED] proposal.

(Confidential) JBC-3, App. 2

[REDACTED] proposal.

(Confidential) JBC-3, App. 3

Composite exhibit of correspondence concerning required information and the Bidders' responses.

(Confidential) JBC-3, App. 4

Composite exhibit of correspondence concerning supplementation and clarification of the Bidders' proposals.

(Confidential) JBC-3, App. 5

Economic comparison in initial screening of Hines 2 and the [REDACTED] and [REDACTED] proposals.

(Confidential) JBC-3, App. 6

Economic comparison in supplemental screening of Hines 2 and the [REDACTED] and [REDACTED] proposals.

(Confidential) JBC-3, App. 7

Evaluation of non-price attributes of [REDACTED] proposal.

(Confidential) JBC-3, App. 8

Evaluation of non-price attributes of [REDACTED] proposal.

18

III. OVERVIEW OF [REDACTED] AND [REDACTED] PROPOSALS.

19

20

Q. Please provide an overview of [REDACTED] proposal.

21

A. In our RFP we had identified a long-term need for generating capacity equivalent to our next-planned 530 MW, 25-year combined cycle Hines 2 unit. In response,

22

23

[REDACTED]

24

[REDACTED]

25

[REDACTED]

1

[REDACTED]

2

[REDACTED]

3

[REDACTED]

4

[REDACTED]

5

[REDACTED]

6

[REDACTED]

7

In the documentation describing its proposal, [REDACTED]

8

[REDACTED]

9

[REDACTED]

10

[REDACTED]

11

[REDACTED]

12

[REDACTED]

13

A copy of [REDACTED] full proposal is included as a confidential appendix item

14

to FPC's Confidential Section of its Need Study, App. 1 to (Confidential) JBC-3.

15

16

Q. Please provide a general overview of the [REDACTED] proposal.

17

A. In its proposal, [REDACTED]

18

[REDACTED]

19

[REDACTED]

20

Specifically, [REDACTED]

21

[REDACTED]

22

[REDACTED]

23

[REDACTED]

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

[REDACTED]

19 A copy of [REDACTED] full proposal is included as a confidential
20 appendix item to FPC's confidential portion of its Need Study, App. 2 to
21 (Confidential) JBC-3.

1 Q. Did you seek additional information from these bidders?

2 A. Yes, we did. In both cases, the bidders failed to include information in their original
3 submissions that we had required in our RFP. So our first step was to contact both
4 bidders to ask for pertinent information that was requested in the RFP but was not
5 submitted; this was information that was necessary to complete an objective and
6 comprehensive evaluation of each proposal. Both bidders provided additional
7 information in response to these requests. The correspondence between FPC and
8 both bidders concerning our follow-up requests for information is included in FPC's
9 Confidential Section of its Need Study, Appendix 3, (Confidential) JBC-3.

10 Following our preliminary review of the proposals, we then contacted both
11 [REDACTED] and [REDACTED] to ask for additional information pertinent to the proposals,
12 as indicated in Appendix 4 to FPC's Confidential Section of its Need Study,
13 (Confidential) JBC-3.

14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

[REDACTED]

[REDACTED]

FPC requested clarification of a number of aspects of [REDACTED]
proposal as well. For example, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1 IV. EVALUATION OF THE PROPOSALS.

2

3 Q. Did FPC evaluate both proposals?

4 A. Yes, we did.

5

6 Q. Please tell us what initial steps you took to conduct your evaluation.

7 A. As I explained, our evaluation actually began from the time we opened the bids.

8 Our first step was to ensure that we had all the information that we had requested in

9 our RFP to enable a thorough evaluation of all proposals. After taking steps to

10 acquire anything that was missing, we analyzed the proposals to make sure we

11 understood what was being offered. As a part of this review, we wrote to and met

12 with representatives of each bidder to make sure that we understood the proposals

13 and to obtain clarifying information, as may be needed.

14 After we had fully explored each proposal with representatives of the

15 bidders, and we were sure we understood what each bidder was offering, we

16 conducted an analysis of both the price terms and non-price attributes of each

17 proposal.

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 conducted a full analysis of all other pertinent aspects of each proposal and

22 concluded that, [REDACTED]

23 [REDACTED] neither proposal would be a superior or even an equivalent alternative to

1 the Hines 2 power plant. Hines 2 appeared to be a significantly superior alternative
2 to both proposals, [REDACTED]

3 [REDACTED]

4

5 **Q. Please explain how you analyzed the price terms of the proposals.**

6 **A.** The first thing we did was to put each proposal in its best light. Accordingly, in
7 conducting an analysis of the price terms of the [REDACTED] proposal, [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] In optimizing the [REDACTED] proposal, the PROVIEW screening run

21 indicated that the best expansion plan alternative involving a [REDACTED] proposal option

22 [REDACTED]

23 [REDACTED]

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

[REDACTED]

To evaluate the [REDACTED] project, we performed economic evaluations with PROVIEW based on assumptions that [REDACTED]. In optimizing the [REDACTED] proposal, PROVIEW indicated that [REDACTED].

The next step was to use PROVIEW to compare the best [REDACTED] scenario and the best [REDACTED] scenario with Hines 2. In each case, Hines 2 proved to be the superior alternative. See Appendix 5 to (Confidential) JBC-3.

Even when both proposals were modeled in the best light, given FPC's system needs, neither one surpassed the Hines 2 resource option in the initial screening. FPC could have stopped there. But, because FPC had received only two proposals in response to its RFP, FPC elected to add an additional screening process to its evaluation of the two proposals, providing for an even more refined assessment of both the price and non-price attributes of the proposals. In this supplemental screening process, neither proposal was omitted, and both were again compared to the Hines 2 resource option.

In the supplemental screening process, we used Henwood Energy Services, Inc.'s proprietary PROSYM production costing model and an Excel proforma

1 financial spreadsheet to develop more detailed system revenue requirements
2 comparisons between the options. In doing so, we were able to perform a more
3 sophisticated comparison of the price attributes of the best [REDACTED] option with Hines
4 2 and of the best [REDACTED] option with Hines 2. The results of these
5 comparisons, the cumulative present worth revenue requirements ("CPWRR") of
6 each resource option, are reflected in Appendix 6 to the Confidential Section of
7 FPC's Need Study, (Confidential) JBC-3. This graph depicts the revenue
8 requirements associated with Hines 2 as the baseline (the horizontal axis) and
9 depicts the revenue requirements associated with the [REDACTED]
10 proposals as the curves above the Hines 2 baseline when they are more expensive
11 than Hines 2 (and below the line if they are less expensive).

12 As the graph shows, the best [REDACTED] scenario would impose revenue
13 requirements over a 25-year period [REDACTED] more than the projected
14 Hines 2 revenue requirements. The projected revenue requirements of the best
15 [REDACTED] proposal will exceed the projected revenue requirements of Hines 2 by
16 [REDACTED] over the same 25-year period of time.

17
18 **Q. Please describe key assumptions and data that you used in making these**
19 **comparisons.**

20 **A.** The Company's forecasts of customers, energy sales, peak demand, fuel, and
21 economic factors remained consistent with the key forecasts and assumptions used
22 in the IRP update and Ten-Year Site Plan. Another critical component in the
23 supplemental screening evaluation of the bids was the analysis of the capital

1 requirements associated with each bid and the Hines 2 resource option. This
2 analysis allows us to assess both the costs associated with placing each resource
3 option into service on FPC's system and the impact of those costs on the Company.
4 One component in this part of our evaluation of the price terms of the bids was the
5 recognition of the impact of the imputed debt that would be associated with each of
6 the proposals. The financial community considers long-term contractual
7 arrangements as analogous to debt obligations of the responsible company. In
8 recognition of the financial obligation underlying a long-term contract, agencies,
9 such as Moody's and Standard & Poors, that establish the financial ratings of
10 companies like FPC will impute an appropriate level of debt in their evaluations of
11 the company's financial condition representing the cost of the contract, thereby
12 increasing that company's cost of capital. Consideration of such imputed debt is
13 required by the PSC rules. Subsection 7 of PSC Rule 25-22.081 (concerning what a
14 utility must show in its petition for a determination of need) states that "[i]f the
15 generation addition is the result of a purchased power agreement between an
16 investor-owned utility and a non-utility generator, the petition shall include a
17 discussion of the potential for increases . . . in the utility's cost of capital"

18 When imputing a level of debt associated with a contractual arrangement, a
19 rating agency will first determine a "risk factor" to be applied to the contract. This
20 risk factor is statistically determined, based upon the underlying characteristics of
21 the contract (for example, fixed versus variable payments, provisions for liquidated
22 damages, etc.). The rating agency will then apply the risk factor to the cumulative
23 net present value of the projected payment stream associated with the contract to

1 calculate the amount of debt that will be imputed. As a point of reference, Standard
2 & Poors currently applies a 40 percent risk factor when imputing debt associated
3 with the Company's existing unit power sale contract with the Southern Company.

4 In order to ensure that imputed debt was accurately reflected in our financial
5 evaluation process, the Company contacted Standard & Poors to determine what risk
6 factor the rating agency might assign to the proposals made by the bidders on this
7 project. [REDACTED]

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

16 By multiplying that risk factor against the net present value of capacity
17 payments under a long-term contract, we obtain the amount of debt that rating
18 agencies reasonably will impute to the Company's balance sheets due to the
19 contract. Since electric utilities, like other businesses, try to maintain a reasonable
20 balance between debt and equity, the Company would need to raise an equivalent
21 amount of equity (at an after tax cost of equity of roughly 12 percent) to offset this
22 imputed debt. This is the manner in which a power purchase agreement will lead to

1 increased capital costs for the Company, and this impact is reflected in Appendices
2 5, and 6, to the Confidential Section of the Need Study, (Confidential) JBC- 3.

3 Even without taking into account the cost of imputed debt, Hines 2 would be
4 economically more advantageous than either proposal over the life of the Hines 2
5 plant [REDACTED]

6 [REDACTED] Absent any impact by imputed debt, and over the 25-year period, the
7 revenue requirements for the [REDACTED] would exceed those for Hines 2 by [REDACTED]
8 [REDACTED] and the revenue requirements for the [REDACTED] would
9 exceed those of Hines 2 by [REDACTED], on price-related factors alone. When
10 imputed debt is taken into account, Hines 2 is clearly superior to both proposals.

11

12 Q. Did you perform any sensitivity analyses?

13 A. Yes, we did. In addition to the base case analysis performed in the supplemental
14 screening phase, we examined several sensitivities to identify variances, if any, that
15 would warrant additional consideration in any of the scenarios. These sensitivities
16 included a high-fuel price forecast case, a low-fuel price forecast case, and a case
17 referred to as the "Gulfstream" sensitivity that represented a scenario in which that
18 proposed competing gas pipeline was developed and lower cost transportation was
19 available to us.

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

1
2
3
4
5
6

[REDACTED]

7
8
9
10
11

Overall, the results from the sensitivity analyses were consistent with the results of the base case analysis, with Hines 2 remaining the least-cost option. The sensitivity studies helped confirm that Hines 2 was a robust option and that we should be confident in moving forward with the selection process.

12

Q. Did you evaluate the non-price attributes of both proposals?

13

A. Yes, we did.

14

15

Q. Please describe your evaluation of the non-price attributes of the proposals.

16

A. We had identified a number of non-price attributes in our RFP that we anticipated might be relevant and significant to the evaluation of competing proposals, though we made clear in our RFP and during the pre-bid meeting that we wanted to encourage creativity and innovation on the part of prospective bidders, on price and non-price aspects of any proposal.

17

18

19

20

21

We reviewed each proposal thoroughly to analyze the strengths and weaknesses of all non-price attributes of each proposal, and we developed a matrix reflecting the results of our analysis. We decided not to attempt to assign numerical

22

23

1 values to these factors because (1) the analysis was often subjective, (2) the value of
2 a particular factor, either pro or con, might differ in the context of different
3 proposals, and (3) comparing one factor to another would be like comparing apples
4 to oranges and thus could not be done on an exact numerical basis. The matrices we
5 prepared reflecting the results of our evaluation of non-price attributes are included
6 as Appendix 7 [REDACTED] and Appendix 8 [REDACTED] to the Confidential Section
7 of FPC's Need Study, (Confidential) JBC-3.

8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

[REDACTED]

1

[REDACTED]

2

[REDACTED]

3

[REDACTED]

4

5 **Q. What conclusions did FPC reach on the basis of this evaluation?**

6 A. FPC determined that the Hines 2 alternative was clearly superior on price- and non-
7 price attributes to either the [REDACTED] or [REDACTED] proposal. After our thorough
8 evaluation of both competing proposals, FPC decided to proceed with obtaining the
9 necessary regulatory approvals to build Hines 2.

10

11 **Q. Does this conclude your confidential testimony?**

12 A. Yes, it does.

13

THE NEED STUDY

IN SUPPORT OF FLORIDA POWER CORPORATION'S PETITION FOR DETERMINATION OF NEED OF HINES UNIT 2 POWER PLANT

CONFIDENTIAL SECTION

VI. FPC's Request for Proposals ("RFP").

D. RFP Proposals.

FPC received two proposals, one from [REDACTED] and the other from [REDACTED].

[REDACTED]

In its RFP, FPC asked for supply-side alternatives to its 25-year, 530 MW next-planned generating plant. In its original response to the RFP, [REDACTED] proposed to enter into [REDACTED]

[REDACTED]

[REDACTED] In its proposal, [REDACTED] expressed its intent to [REDACTED]

[REDACTED]

[REDACTED] A copy of [REDACTED] full proposal is in Appendix 1 to this Confidential Section of FPC's Need Study.

[REDACTED] proposed to build a [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] A copy of [REDACTED]
[REDACTED] full proposal is in Appendix 2 to this Confidential Section of FPC's Need Study.

E. Requests for Required and Supplemental Information.

FPC's first step in its evaluation of the RFP proposals was to ensure that it had all the information that it had requested in the RFP to enable a thorough evaluation of the proposals. FPC wrote to and met with representatives of each bidder to obtain clarifying information, as discussed herein.

Both [REDACTED] and [REDACTED] omitted information in their original submissions that FPC had required in its RFP. FPC contacted both bidders and asked them for the missing information, which was needed both to make the proposals complete and for FPC to evaluate them fully. Both bidders provided additional information in response to these requests. The requests for required information, and the bidders' responses to those requests, are contained in Appendix 3 to this Confidential Section of FPC's Need Study.

Following FPC's preliminary analysis of the proposals, FPC requested additional information pertinent to the proposals from [REDACTED] and [REDACTED]. These requests, and the bidders' responses, are contained in Appendix 4 to this Confidential Section of FPC's Need Study.

In [REDACTED] case, FPC advised [REDACTED] among other things, that [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

FPC requested clarification of a number of aspects of [REDACTED] proposal as well.

For example, [REDACTED]

[REDACTED]

F. Evaluation and Analysis of RFP Proposals.

After FPC had fully explored each proposal with representatives of the bidders, and FPC was sure it understood what each bidder was offering, FPC conducted an analysis of both the price terms and non-price attributes of each proposal. [REDACTED]

[REDACTED]

[REDACTED] FPC conducted a full analysis of all other pertinent aspects of each proposal. FPC concluded that,

[REDACTED] neither proposal would be a superior or even an equivalent alternative to the Hines 2 power plant. Put another way, Hines 2 appeared to be significantly superior to both proposals, [REDACTED]

[REDACTED]

G. Initial Screening Analysis.

With respect to the evaluation of the proposals on price terms, FPC began by conducting an individual evaluation of each proposal with the PROVIEW optimization module of New Energy Associate's PROSCREEN model, followed by an evaluation in PROVIEW comparing each proposal to Hines 2. In the initial screening evaluation using PROVIEW, the proposals were placed in the best light possible, given FPC's system requirements. In other words, the PROVIEW model "made the best of" the proposal by developing an optimal expansion plan around each proposal that produced the most cost-effective total plan rather than forcing the proposal to fit into FPC's existing ten-year expansion plan.

[REDACTED]

PROVIEW indicated that [REDACTED]

[REDACTED]

The least cost determination and ranking in PROVIEW is based on cumulative present worth revenue requirements ("CPWRR").

Similarly, to evaluate the [REDACTED] project, [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

For the final step in its initial screening evaluation, FPC took the best expansion plan incorporating the [REDACTED] proposal and the best expansion plan including the [REDACTED] and, using the PROVIEW model, compared them with the Hines 2 expansion plan. In this way, FPC was able to compare the system costs for the best [REDACTED] resource plans to the Hines 2 expansion plan at the same time and rank them accordingly. In each case, Hines 2 proved to be the superior alternative. The results of these final PROVIEW model runs in FPC's initial screening analysis are contained in Appendix 5 to this Confidential Section to FPC's Need Study.

H. Supplemental Screening Analysis.

As indicated above, the proposed Hines 2 unit was the least-cost alternative from the initial screening analysis using PROVIEW. Instead of ending its analysis there, however, FPC elected to conduct an additional screening process. Because FPC received only two responses to its RFP, FPC decided to perform a supplemental screening of the two proposals, using the proprietary PROSYM production costing model and a pro forma financial spreadsheet to capture the total system revenue requirements in more detail by including all available information on the capital requirements of each proposal. The supplemental screening process started with the best [REDACTED] and [REDACTED] resource plans from the PROVIEW analysis and compared them to the Hines 2 resource plan in PROSYM, which culminated in a comparison of

the pro forma financial spreadsheets for each option. This part of the supplemental screening process provided FPC a more refined assessment of the price attributes of the two proposals.

The principal output of the PROSYM model is incremental production costs. PROSYM is a more detailed utility-system simulation model. Where PROVIEW simulates utility dispatch results using typical weeks for each month at a time, PROSYM is an hourly production cost model. As a result, PROSYM determines at what capacity a unit is used, for what period of time, and at what cost, based on its likely dispatch interactions with other system resources. The variable system costs generated by PROSYM, however, are only part of the total cost picture. The capital requirements for each proposal — for example, the capacity payments requested by the two bidders and other non-fuel revenue requirements — are taken into account by using a pro forma financial spreadsheet, to which the variable system costs generated by the PROSYM model are also added, in order to get the total revenue requirements for each resource proposal or alternative plan. The results of this analysis using the pro forma financial spreadsheet are developed in CPWRR. This analysis in FPC's supplemental screening of the two bids and the Hines 2 resource plan allowed FPC to assess both the costs associated with placing each resource proposal into service on FPC's system and the impact of those costs on the Company.

The comparisons of the [REDACTED] and [REDACTED] expansion plan proposals to the Hines 2 expansion plan from FPC's supplemental screening process is in Appendix 6 of this Confidential Section of FPC's Need Study. Appendix 6 contains a graph depicting the revenue requirements associated with Hines 2 as the baseline for comparison (the horizontal axis), and depicting the revenue requirements associated with the [REDACTED] and [REDACTED] expansion plan proposals, respectively, as the curves above (or below) the Hines 2 baseline. As these graphs show, the [REDACTED] expansion plan scenario would impose revenue requirements over a 25-year period [REDACTED]

more than the projected Hines 2 revenue requirements. The projected revenue requirements of the expansion plan proposal will exceed the projected revenue requirements of Hines 2 by over the same 25-year time period.

In addition to energy price interactions in dispatch and fixed cost comparisons, another critical component of the capital requirements for each bid in FPC's evaluation of the price terms of the bids in both the initial and supplemental screening processes was the cost of imputed debt that would be attributed to each proposal. This assessment is required by the PSC rules and by sound business principles. See Rule 25-22.081(7), F.A.C. This rule, requiring the utility to address "the potential for increases . . . in the utility's cost of capital. . . ," refers to the impact of imputed debt, as assessed by rating agencies (and lenders and investors).

Rating agencies, such as Moody's and Standard & Poors, treat a substantial power purchase agreement, with its attendant commitment to make a stream of fixed payments over a period of years, like a debt obligation, which has a similar commitment to make fixed payments over a term of years. Electric utilities, more so than most other businesses, however, strive to maintain a certain balance between debt and equity on their books because it helps them maintain their credit rating with the rating agencies. The reason they want to maintain their credit rating is because the electric utility industry is a capital intensive industry; thus, funding to support the utilities' capital investments is frequently required. Maintaining their credit rating keeps the utilities' cost of raising such funds down. For when they become "debt heavy," lenders will charge more in fees and interest than they otherwise would and capital investors likewise will demand a greater return in dividends and capital appreciation than they otherwise would to account for the increased risk associated with the increased debt.

To account for this fact, rating agencies assign a "risk factor" to long-term contracts. For example, rating agencies have assigned a risk factor of 40 percent to FPC's existing unit power sale contract with the Southern Company. The risk factor is statistically determined, based upon the underlying characteristics of the contract (for example, fixed versus variable payments, provisions for liquidated damages, etc.), and other factors that affect the likelihood that the fixed payments will be made over the entire contract period, such as the type of technology and fuel employed by the party contracting with the utility to generate the energy. The rating agency applies the risk factor to the cumulative net present value of the projected fixed payment stream associated with the contract to calculate the amount of debt that will be imputed.

FPC contacted Standard & Poors to determine what risk factor the rating agency might assign to the proposals made by the bidders in response to this specific RFP. [REDACTED]

[REDACTED]

FPC obtained the amount of debt that the rating agencies reasonably would impute to the Company's balance sheet due to the [REDACTED] by multiplying the risk factor against the net present value of capacity payments, just as the rating agencies would do. To maintain a

reasonable balance between the debt and equity on its balance sheet with the added "debt" from [REDACTED] the Company would need to raise an equivalent amount of capital (at an after tax cost of equity of roughly 12 percent) to offset this imputed debt. This is the manner in which a power purchase agreement will lead to increased capital costs for the Company, and this impact is reflected in Appendices 5 and 6 to this Confidential Section of FPC's Need Study.

Even without taking into account the cost of imputed debt, however, Hines 2 would be economically more advantageous than either proposal over the life of the Hines 2 plant, [REDACTED] [REDACTED] When imputed debt is taken into account, Hines 2 is clearly superior to both proposals on price terms alone.

In addition to the base case analysis performed in the supplemental screening phase, several sensitivities were also examined to identify variances, if any, that would warrant additional consideration in any of the scenarios. These sensitivities included a high-fuel case, a low-fuel case, and a case referred to as the "Gulfstream" sensitivity that represented a scenario in which the proposed competing gas pipeline was developed and lower cost transportation was available to FPC.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Overall, the results from the sensitivity analyses were consistent with the results of the base case analysis, with Hines 2 remaining the least-cost option. The sensitivity studies helped confirm that a robust option preference had been identified and that FPC should be confident in moving forward with the selection process.

I. Non-Price Attributes.

FPC carefully evaluated the non-price attributes of the [REDACTED] and [REDACTED] proposals as well in its supplemental screening analysis. While encouraging innovative proposals, FPC identified in its RFP a number of non-price attributes that might be significant to the evaluation of competing proposals. FPC reviewed each proposal thoroughly to analyze the strengths and weaknesses of all non-price attributes of each proposal. FPC developed a matrix reflecting the results of its analysis. This matrix representing the non-price attributes evaluation for both the [REDACTED] and [REDACTED] proposals is included in Appendix 7 and 8 to this Confidential Section of FPC's Need Study.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Overall, the Hines 2 plant proved superior to both the [REDACTED] and [REDACTED] proposals with respect to non-price attributes.

J. Conclusion.

FPC concluded, based on a thorough analysis of numerous other supply-side generation alternatives and the two bids FPC received in response to its RFP, that the Hines 2 power plant is the most cost-effective supply-side alternative available to FPC.

Hines 2 was clearly superior on both price- and non-price attributes to either the [REDACTED] or [REDACTED] proposal. After FPC's thorough evaluation of both competing proposals, FPC decided not to short-list either one of the bidders, informed both bidders of that decision, and decided to proceed with obtaining the necessary regulatory approvals to build Hines 2.

THE NEED STUDY

IN SUPPORT OF

**FLORIDA POWER CORPORATION'S
PETITION FOR DETERMINATION OF NEED
OF HINES ENERGY COMPLEX UNIT 2**

CONFIDENTIAL SECTION

LIST OF APPENDIX ITEMS.

1. Confidential Request For Proposal Response from Bidder A.
2. Confidential Request For Proposal Response from Bidder B.
3. Confidential Florida Power Corporation ("FPC") Requests for Required Information and the Bidders' Responses.
4. Confidential Florida Power Corporation ("FPC") Requests for Supplemental Information and the Bidders' Responses.
5. Confidential FPC Initial Screening Evaluation of RFP Responses.
6. Confidential FPC Supplemental Screening Evaluation of RFP Responses.
7. Confidential FPC Non-Price Evaluation of Bidder A's Response to FPC's RFP.
8. Confidential FPC Non-Price Evaluation of Bidder B's Response to FPC's RFP.

This is the bid in response to the RFP, the disclosure of which would impair the utility's efforts to contract for such services on favorable terms.
§366.093(3)(d).

This is the bid in response to the RFP, the disclosure of which would impair the utility's efforts to contract for such services on favorable terms.
§366.093(3)(d).

This is information concerning the bids in response to the RFP, the disclosure of which would impair the utility's efforts to contract for such services on favorable terms.

§366.093(3)(d).

This is information concerning the bids in response to the Request for Proposals (“RFP”), the disclosure of which would impair the utility’s efforts to contract for such services on favorable terms.
§366.093(3)(d).

This is information concerning the bids in response to the RFP, the disclosure of which would impair the utility's efforts to contract for such services on favorable terms.

§366.093(3)(d).

This is information concerning the bids in response to the RFP, the disclosure of which would impair the utility's efforts to contract for such services on favorable terms.

§366.093(3)(d).

This is information concerning the bids in response to the RFP, the disclosure of which would impair the utility's efforts to contract for such services on favorable terms.

§366.093(3)(d).

This is information concerning the bids in response to the RFP, the disclosure of which would impair the utility's efforts to contract for such services on favorable terms.

§366.093(3)(d).