ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Determination of Need of Hines Unit 3 Power Plant	)	DOCKET NO. 020953-EI
	)	Submitted for filing: September 4, 2002

DIRECT TESTIMONY OF DANIEL J. ROEDER

ON BEHALF OF FLORIDA POWER CORPORATION

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IN RE: PETITION FOR DETERMINATION OF NEED

BY FLORIDA POWER CORPORATION

FPSC DOCKET NO. 020953-EI

DIRECT TESTIMONY OF DANIEL J. ROEDER

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, employer, and business address.

A. My name is Daniel J. Roeder and I am an employee of Carolina Power & Light (CP&L), 410 S. Wilmington Street, Raleigh, North Carolina, 27601.

Q. Please tell us your position with the CP&L and describe your duties and responsibilities in that position.

A. I am a Project Leader in the System Resource Planning Section of the System Planning & Operations Department. The System Resource Planning Section is responsible for the resource planning for both Florida Power Corporation (Florida Power or the Company) and CP&L systems. My responsibilities are usually of the nature of special projects, such as the Request for Proposals (RFP) that is the subject of this testimony. I served as the Project Leader and "Official Contact" for Florida Power's Hines 3 RFP.

Q. Please tell us about your educational background and experience.

A. I graduated from the University of Tennessee with a B.S. in Engineering Science and Mechanics in 1980, and I obtained my M.S. in Mechanical Engineering in 1982. I have been a CP&L employee since 1982 and, with the exception of a one-year rotational field assignment, I have worked the entire time in the System Planning & Operations Department, performing analyses such as production costing, generation reliability, integrated resource planning, and Clean Air Act compliance. During the year prior to the completion of the merger between Florida Power and CP&L, I was a core member of the Integration Team, working as an integration analyst. I am a registered Professional Engineer in the state of North Carolina.

Q. In the time you have spent in System Planning & Operations, have you worked on any RFP before?

A. Yes, I have participated in two of CP&L's RFPs. I was the Manager of the Resource Planning Unit and part of the team that developed CP&L's first RFP, which was issued in 1996, and for which I led the Economic Evaluation Team. I was involved to a lesser extent in the second RFP CP&L issued in 1997.

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe Florida Power's RFP, the proposals we received in response to the RFP, the evaluation performed on the proposals, and the results of the evaluation.

Q. Are you sponsoring any sections of Florida Power's Need Study (JBC-1)?

A. Yes, I am sponsoring Section IV, "Resource Selection—The 2005 Request for Proposals (RFP)" of the Need Study. I am also sponsoring the confidential Appendix J to the Need Study, "Description of Proposals."

Q. Are you sponsoring any exhibits?

A. Yes, I am sponsoring the following exhibits:

Exhibit ___ (DJR-1) Results of Detailed Economic Analysis

Exhibit ___ (DJR-2) RFP Evaluation Process

Exhibit ___ (DJR-3) Summary of Proposals

Exhibit ___ (DJR-4) Threshold Requirements

Exhibit ___ (DJR-5) Results of Threshold Screening

Exhibit ___ (DJR-6) Results of Economic Screening

Exhibit ___ (DJR-7) Results of Optimization Analysis

Exhibit ___ (DJR-8) Minimum Evaluation Requirements

Exhibit ___ (DJR-9) Technical Criteria

Exhibit ___ (DJR-10) Final Results of Technical Evaluation

I prepared each of these exhibits, and each is true and accurate.

Q. Please summarize your testimony.

A. Upon determining the need for additional generating capacity as described in the testimony of John B. Crisp, Florida Power embarked upon the RFP process. The Company followed Rule 25-22.082 F.A.C. in the development and implementation of the RFP. We issued the RFP, providing the notification required by the Rule and information about the Company's self-build alternative, Hines Unit 3. We sought proposals that would be in service by December 1, 2005 and that would be reliable, dispatchable, and technically sound. We were looking for the proposals to come from experienced, financially-sound developers that would be able to secure the necessary approvals and permits, and that had planned for an adequate fuel supply. We fairly evaluated all proposals by systematically following a structured, orderly evaluation process, which we identified in the RFP, including the criteria by which we evaluated the proposals.

Q. Briefly, what were the results of your RFP?

A. We received proposals from seven bidders. Two of the proposals were eliminated because they did not meet the basic informational requirements of the RFP. Of the five remaining participants, one proposal did not pass the Technical Evaluation. The remaining four proposals were put on the Short List and compared to our self-build alternative, Hines Unit 3. We performed a significant amount of analysis, evaluating the price and non-price attributes of the alternatives. The final evaluation of the non-price attributes showed Hines Unit 3 to be one of the top two ranked alternatives in all the categories. The detailed economic analysis

found Hines Unit 3 to be over $92 million (2002 dollars) less expensive than the least cost alternative proposal. The least cost Greenfield Proposal (another combined cycle plant) was found to be more than $187 million (2002 dollars) more expensive than Hines Unit 3. Exhibit ___ (DJR-1) shows the results of the analysis. Finally, we performed sensitivity analyses, in which we gave advantages to the third-party proposals by assuming decreases in their costs or increases in the costs associated with Hines Unit 3. In all cases, Hines 3 was the least cost alternative, demonstrating that the selection of Hines 3 is a sound choice. Based on the analyses, Florida Power concluded that Hines Unit 3 is the most cost-effective alternative for meeting the need for additional generating capacity in 2005 to serve Florida Power's customers. My testimony will discuss all of the analyses we performed, in detail.

III. THE RFP PACKAGE

Q. How did Florida Power construct the RFP?

A. The RFP Package consisted of four parts. The first part was the RFP Document itself, which outlined Florida Power's need for generating capacity, the objectives of the RFP, the Company's next-planned generating unit, and a schedule of key dates in the RFP process, and identified myself as the RFP contact. The RFP Document also discussed Florida Power's requirements for submission of bids, and it described the criteria that we would use to compare and evaluate the price and non-price attributes of the proposals. The second part was the Response

Package, which contained a description of the information bidders were to provide in their proposals. It defined the required organizational structure and contents of any submitted proposal and it contained instructions on how to complete the schedules (or forms) provided to the bidders. The third part consisted of the Schedules (Microsoft Excel worksheets) that bidders were required to use to provide data, including pricing, to Florida Power. The final part was a Microsoft Word version of the proposed Key Terms and Conditions of a purchased power agreement, supplied to bidders so they could provide comments in "red-line" form.

IV. THE EVALUATION METHODOLOGY

Q. Did Florida Power provide a detailed description of the evaluation process it was going to use?

A. Yes, we did. In the RFP, we described in detail the seven-step evaluation process we planned to use in the evaluation of the proposals.

Q. Please briefly describe the process.

A. The process, described in detail in the RFP itself, is shown in flowchart form in Exhibit ___ (DJR-2). This is the same flowchart that was included in the RFP. Briefly, the seven steps of the process were:

1) Screening for Threshold Requirements. In this step, the proposals would be reviewed to ensure they met the informational requirements of the RFP. The

Threshold Requirements were provided in a table in the RFP Document such that the bidders could check to ensure their proposals fulfilled the requirements. Proposals not meeting the Threshold Requirements would be eliminated from further evaluation.

2) Segregation of Bids. In this step, proposals that passed the Threshold Requirements were to be separated into categories distinguished by the type of bid and term. The purpose of this step was to ensure a consistent and fair evaluation by categorizing "like type" proposals and allowing Florida Power to identify the best proposals in each category.

3) Economic Evaluation. In this step, the proposals would be screened based on the fixed, variable, and start payments. Proposals that were significantly higher in cost compared to other proposals would be eliminated from further evaluation.

4) Technical Evaluation. In this step, proposals that passed the Economic Screening would be evaluated on a technical basis to assess their feasibility and viability. Proposals were to be reviewed to ensure they conformed to the minimum evaluation requirements (which were different from the threshold screening requirements) and would be evaluated based on established technical criteria. Tables in the RFP provided both the minimum evaluation requirements and the technical criteria. Florida Power included a description of each of these non-price attributes, as well as the Company's preferences with regard to the attributes.

5) Selection of Short List. In this step, those bids that were found inferior to other bids, based on the economic and technical evaluations, would be eliminated from further consideration.

6) Detailed Evaluation. In this step, proposals that were included on the Short List would be compared to Florida Power's self-build alternative, Hines Unit 3. Proposals would be subjected to a more detailed assessment, and transmission cost impacts would be incorporated into the analysis. Sensitivity analyses would also be performed.

7) Selection of Final List. In this step, Florida Power would identify those bidders with which it would begin contract negotiation. In the event that none of the proposals was clearly superior to Hines Unit 3, a final list would not be selected. We also anticipated contract negotiations and an announcement of an Award List, but that was dependent on the results of the evaluation and would only take place if any of the proposals was superior to Hines Unit 3.

V. THE RFP PROCESS: PRE-SUBMISSION

Q. Let's go through the RFP process. What was the first step?

A. The RFP process started with our announcement that we were going to be issuing an RFP for generating alternatives. We announced this using several methods, beginning with a press release on November 19, 2001. The press release was published or referred to in articles by a number of news services, both in print and

on-line, including the Southeast Power Report, Dow Jones Energy Services, the Tampa Tribune, Yahoo!Finance, and Morningstar.com.

Q. Did you publish public notices as required by Rule 25-22.082?

A. Yes, we did. We published public notices in newspapers of state and national circulation such as the Lakeland Ledger, Tampa Tribune, St. Petersburg Times, Orlando Sentinel, and the Wall Street Journal on various dates between November 20-22, 2001. The notice provided a general description of the Company's next - planned generating unit, the name and address of the contact person from whom to request an RFP package, the Company's web site address where the RFP package could be obtained, and the schedule of critical dates for the RFP process. Fifty-five parties that had previously expressed an interest in other RFPs in the State of Florida were sent an electronic copy of the public notice, via e-mail.

Q. When did Florida Power actually issue the RFP?

A. The RFP package was issued on November 26, 2001 and it was available for downloading from the RFP web site. By December 19, 2001, 60 copies of the RFP package had been downloaded. We also filed the RFP package with the Florida Public Service Commission on December 20, 2001.

Q. When did the potential participants get involved in the RFP process?

A. The first major activity for bidders was to submit a Notice of Intent (NOI) to bid. Bidders were asked, but not required, to submit this form by December 10, 2001.

Submission of this form would ensure that bidders received all information pertaining to the RFP. NOI forms were received from 17 bidders.

Q. Did Florida Power hold a Bidders' Conference?

A. Yes, we held a Bidders' Conference on December 18, 2001 at the Tampa Airport Marriott. The purpose of the Bidders' Conference was to provide interested parties the opportunity to ask questions and seek additional information or clarification about the solicitation process. I made a brief presentation summarizing the RFP process, and then I opened the floor for questions. I provided answers to questions and promised to follow up with answers if I could not provide them at the time. While the bidders were encouraged to submit questions ahead of time, only one bidder provided written questions, and those questions were not received until an hour prior to the commencement of the conference. All questions and the corresponding answers were posted on the RFP web site shortly after the Bidders' Conference. The Q&A section of the web site was updated as additional questions were posed.

Q. When did Florida Power receive proposals?

A. We received proposals from seven bidders on February 12, 2002. The bids were labeled Bid A through Bid G based on the order in which they were opened.

Q. What kinds of proposals did you receive?

A. Five of the seven proposals were Greenfield Proposals (new construction) and two were System Power Proposals. All five Greenfield Proposals involved building new combined cycle units of approximately 500 megawatts (MW). One of the System Power Proposals offered to provide up to 200 MW from the bidder's system of power plants; the other proposed to use existing and proposed future plants to serve 500 MW of Florida Power's needs. A summary table of the proposals is provided in Exhibit ___ (DJR-3). (Please note that the table of proposals contains six Greenfield Proposals. As I will discuss in more detail later, this is because one of the bidders that provided a System Power Proposal later submitted a Greenfield Proposal, and it is included in this table for completeness.) Also provided in the exhibit is a list of the names of the bidders, listed in alphabetical, not Bidder A through Bidder G, order. A more detailed description of the proposals, based on summaries provided by the bidders, can be found in the confidential appendix of the Need Study.

VI. THE RFP PROCESS: EVALUATION – THRESHOLD SCREENING

Q. What happened next?

A. We began our bid evaluation process. The first step in the process was threshold screening. We evaluated all of the proposals with respect to the Threshold Requirements identified in Table IV-1 of the RFP document and shown in Exhibit ___ (DJR-4). Threshold Requirements represent the minimum requirements that all proposals are required to meet to be evaluated, and with which a Bidder's

compliance can be easily assessed. Some examples of Threshold Requirements are general requirements, such as the proposal being received on time, the submittal fee being included, and the power being available for delivery by December 1, 2005. Others include operating thresholds, such as operating the project to conform to voltage and frequency control requirements and agreement by the bidder to coordinate maintenance scheduling, and having control of the site. Another requirement was that the proposal had to have complete and credible answers provided to all questions.

The threshold screening provided a "sanity check" on the proposal. "Is everything here that we asked for? Do we have everything we need to perform our analyses?" If they didn't pass the threshold screening based on our initial review, we went back to the bidders with questions in an effort to help them resolve the deficiencies in their proposals and to make sure we had everything we needed to conduct a thorough evaluation of the bids.

Q. What were the results of the threshold screening?

A. A summary of the Threshold Requirements and the results of the threshold screening are shown in Exhibit ___ (DJR-5). Only two of the proposals initially passed the Threshold Requirements screening process without any deficiencies; however, all of the proposals required at least some clarification.

Two of the proposals were significantly deficient in meeting the informational requirements of the RFP. The proposal submitted by Bidder G included only the schedules and did not answer any of the questions or provide

any of the supporting information required in the RFP. Bidder G also did not provide the proposal submittal fee, and stated that it would provide the fee and supporting information only if it was placed on the Short List. Bidder G was reminded that the submittal fee and supporting information were threshold requirements and that if the proposal did not pass the threshold screening, its proposal would not be evaluated any further. Bidder G acknowledged this, but still declined to submit the fee or provide additional information. The other significantly deficient proposal, submitted by Bidder A, consisted of the forms (although some were incomplete, including pricing), and only a minimal amount of supporting information was provided.

Q. Did Florida Power contact the bidders and inform them of deficiencies in their proposals?

A. Yes. Florida Power informed each of the seven bidders of the various deficiencies in their proposals with respect to the threshold requirements. The Company also requested additional clarification from the two bidders that passed the threshold requirements screening.

Q. How did the bidders respond to notification that their proposals had deficiencies in satisfying the threshold requirements?

A. Five of the seven bidders submitted clarifications and additional information sufficient to pass the threshold requirements screening. The two bidders that submitted the significantly deficient proposals (Bidders A and G) chose not to

submit additional information and were thus eliminated from the RFP process. The submittal fee was returned to Bidder A (Bidder G never paid the fee in the first place).

Q. Did Florida Power have any concerns with any of the proposals that might not have been addressed by the Threshold Requirements?

A. Yes. One of the System Power Proposals was to rely on a single existing plant and a number of proposed and under construction plants. Hence, the bidder of this proposal did not have an existing system of power plants sufficient to supply the approximate 500 MW need of Florida Power. The proposal did not fit the definition of a System Power Proposal; rather, it more closely fit the description of a Greenfield Proposal. Florida Power expressed its concerns about the proposal to the bidder and suggested that it resubmit its proposal as a Greenfield Proposal with all the appropriate schedules and information. The bidder subsequently submitted a new Greenfield Proposal, which we evaluated against the Threshold Requirements. The proposal failed to meet two of the requirements—it demonstrated neither site control nor a sufficient transmission plan. However, the bidder explained in its proposal that it was working on an agreement for the site, which it expected to complete within 60 days. Based on this, we decided to keep the bidder's proposal in the process and revisit this issue later in the process.

VII. THE RFP PROCESS: EVALUATION – ECONOMIC EVALUATION

Q. Please explain the economic evaluation process.

A. There were two parts to the initial economic evaluation process: a screening analysis and an optimization analysis. The screening analysis compared the five remaining proposals to each other in terms of $/kW-year, based on the total prices proposed by the bidders and assumed capacity factors. The purpose of the initial economic screening was to see if any of the proposals were economically "out of line" compared to the other proposals.

Q. What capacity factors did you assume for your screening analysis?

A. We assumed capacity factors of 50 percent to 60 percent. These capacity factors were assumed because this is the range of expected capacity factors for Hines 3 as indicated in the Ten-Year Site Plan.

Q. What was the result of your analysis?

A. The evaluated costs of all five proposals were within a reasonable range of each other. Exhibit ___ (DJR-6) shows the results for the 60 percent capacity factor assumption. For comparison purposes, I've also included the estimated annual revenue requirements for Hines 3, based on both the estimated unit costs published in the RFP and the current estimates.

Since none of the proposals' evaluated costs was extraordinarily high compared to the other proposals, we passed all five proposals on to the

optimization analysis. In addition, because of the small number of proposals, we decided to pass all five the proposals on to the Technical Evaluation.

Q. What was the purpose of the optimization analysis?

A. The purpose of the optimization analysis was to develop an optimal resource plan for each bidder's proposal assuming the proposal as a given. These resource plans would later be used in the detailed economic analysis. The optimization analyses were performed for a period of 25 years to capture all of the costs associated with each alternative, and, in particular, to determine the type of capacity that would fill out the study period after the end of the term of the proposed purchase. The "filler" supply alternatives that could be selected were generic combustion turbines and combined cycle units. As expected, the resource plans built around the Greenfield proposals were similar to each other.

Q. Please explain the optimization analysis you performed.

A. The optimization analysis was performed using the PROVIEW optimization model. While the screening analysis compared the proposals to each other based simply on the cost of the proposals in isolation, the optimization analyses assessed the impact of each proposal on total system costs. The impact on total system costs is important because it shows the net impact on the customer of choosing an alternative, including both the project cost and the impact the alternative would have on system operating costs. Such an analysis explicitly examines the relative impacts on system costs for fuel and variable O&M of the other units on Florida

Power's system, and any impact the alternative would have on Florida Power's purchased power costs.

Q. Please explain what the PROVIEW model is and what it does.

A. As I mentioned, PROVIEW is an optimization model, which we use to develop optimal resource plans, where the objective function is to minimize the cumulative present value of revenue requirements for the Florida Power generation system, subject to the 20 percent Reserve Margin constraint. Thus for each bidder's proposal, PROVIEW will tell us the optimal generation expansion plan for the 25 year study period, if we selected the bidder's proposed resource.

Inputs to the model include the load and energy forecast and the costs and characteristics (such as heat rates, outage rates, and maintenance requirements) of the existing generating units and purchase power agreements. A user also provides costs and operating characteristics of potential future generating resources, which could be generating units or purchases.

With these descriptions of the demand and existing and future resources, PROVIEW develops alternative resource plans to meet the projected future customer requirements using all possible combinations of resources, and it calculates the cumulative present value of revenue requirements for each combination. The model then sorts each alternative plan from lowest to highest cost. From an economics-only perspective, the lowest cost plan is the optimal plan.

Q. What were the results of the optimization analyses?

A. Exhibit ___ (DJR-7) shows the economic results of these optimization analyses. The costs are stated in terms of cumulative present value of revenue requirements for the total system. The top figure in the exhibit shows the total cumulative present value of revenue requirements associated with each alternative and the bottom figure shows the difference in cumulative present value of revenue requirements from a base case on an annual basis. The analysis shows that a resource plan built around Bidder E's proposal has the lowest future cost for the Florida Power customers of any of the responses we received to the RFP. We examined two alternative proposals from Bidder E: a five-year proposal and a 10-year proposal. The optimization analysis shows the five-year proposal to have lower costs than the 10-year proposal. Therefore, the detailed evaluation considered only the five-year proposal from Bidder E. For comparison purposes, the figures also show the costs associated with an optimal resource plan based on the addition of Hines 3. This analysis shows Hines 3 to be approximately $90 million less expensive than the least-cost proposal from Bidder E.

VII. RFP PROCESS: EVALUATION – TECHNICAL EVALUATION

Methodology

Q. What was the purpose of the Technical Evaluation?

A. The purpose of the Technical Evaluation was to assess the non-price attributes of the proposals by evaluating the quality of the proposals from a technical

perspective. There were two parts to the Technical Evaluation—one, the Minimum Evaluation Requirements and two, the Technical Criteria. (Note that these are different than the Threshold Requirements, discussed earlier in my testimony, which were designed to ensure that proposals contained all the information we needed to evaluate the proposals and that the proposals addressed the basic requirements of the RFP.) We used the Technical Evaluation to help us get to the Short List by ensuring that all the proposals that went to the Short List were technically viable.

Q. Briefly, what were the Minimum Evaluation Requirements?

A. The Minimum Evaluation Requirements (MERs), which were provided in the RFP and are shown in Exhibit ___ (DJR-8), were the technical "must have" elements of a proposal. They were the components, or characteristics, the proposals had to have to move forward in the process. If a proposal did not meet one of the MERs, it would not make the Short List.

Q. How were proposals evaluated on the MERs?

A. Each proposal was evaluated on each requirement on a "Go" / "No Go" basis.

Q. Briefly, what were the Technical Criteria?

A. The Technical Criteria were characteristics (non-price attributes) we wanted proposals to have, and that would make a proposal more attractive to us. The criteria fell into three categories: operational quality, development feasibility, and

project value, as summarized in Exhibit ___ (DJR-9). While the Minimum Evaluation Requirements are the "musts," the Technical Criteria are the "wants." We didn't necessarily envision that the Technical Criteria would eliminate anyone unless, of course, a proposal consistently ranked at the bottom of the pack. If a proposal didn't have something we wanted or, perhaps, they had it but not to the quality we desired, we would ask the bidder about it, to see if they would be willing to improve their proposal in that respect.

Q. How were proposals evaluated on the Technical Criteria?

A. Each proposal was assessed on each criterion and the proposals were ranked relative to the other proposals. For criteria that only applied to Greenfield Proposals, the proposals were ranked from one to four; otherwise, they were ranked from one to five. In this ranking system, one is considered the best. This method of ranking the alternatives allowed us to see if any of the proposals were significantly better or worse than any of the rest, based on the Technical Criteria.

Q. Did you use a weighting system to score the proposals?

A. No, we did not.

Q. If the criteria don't have weightings and you don't publish the weightings ahead of time, how were the potential participants to know what is important to you?

A. For the Minimum Evaluation Requirements, since they were all "musts," and since not having any one of them would keep a proposal from making the Short List, no one is more important than the others—they were all critical. In the discussion of the Technical Criteria in the RFP at pages IV-7 to IV-11, we stated our preferences with respect to each criterion. A successful RFP process will inform bidders to the maximum extent possible the preferences the evaluator has for each critical element. As examples, we stated that we preferred proposals that had no operating hours limits, and Bidders who had made greater progress in securing permits and approvals were preferred. Our objective was to balance the desirability of providing as much information about our preferences as possible with the opportunity to appropriately evaluate creative proposals and leave ourselves room to exercise our professional judgment. We believe that specifying a more prescriptive weighting and ranking scheme at the outset of the RFP process limits bidders' flexibility to creatively add value to their proposals, thus distinguishing themselves from their competition.

I believe our RFP struck the right balance; we clearly stated the technical criteria and our preferences with respect to each one. Our ranking system allowed us to use our judgment to determine which proposals were better than the others for any given criterion. Looking at the rankings, we could determine if any proposal was significantly better than the others.

Q. Who evaluated the proposals in the Technical Evaluation?

A. We established separate teams staffed with personnel with expertise in the areas of development and construction, engineering (operations), environmental, financial viability, fuel, key terms and conditions, and transmission to review the proposals. Each of the teams received the executive summaries of the proposals and only those portions of the proposals that dealt with its area of expertise. The technical experts were instructed, to the greatest extent possible, to disregard anything they knew about the Hines Energy Complex. Only the economic evaluation team had access to the pricing proposals, since the other technical evaluators did not need to know the pricing proposals to perform the evaluation of the proposals on their technical merits. Thus, the technical evaluations were performed blind to the economics of the proposals. This was done to make the technical evaluation as impartial as possible.

Minimum Evaluation Requirements

Q. Please explain the Minimum Evaluation Requirements in more detail. What were they and why were they important?

A. There were nine MERs in six different categories: General Requirements, Environmental, Engineering and Design, Fuel Supply and Transportation Plan, Project Financial Viability, and Project Management Plan, as shown in Exhibit ___ (DJR-8). The MERs are what Florida Power feels are the most important non-price attributes of supply alternatives.

The general requirements MER was established to ensure the proposal was a valid proposal—it had to be reasonable and bona fide. There was no single item

the bidders had to provide to meet this requirement; rather, the proposal would be judged as a package on whether it was in keeping with the intent of the RFP and its terms and definitions.

The two requirements in the environmental category, that a preliminary environmental analysis had been performed and that a reasonable schedule for securing permits be presented to Florida Power, applied only to Greenfield Proposals. The purpose of these requirements was to ensure, to the greatest extent possible, the proposed project could obtain the necessary environmental permits.

There were also two requirements in the engineering and design category. The purpose of the requirements in this category was to determine if the proposed technology was viable from an engineering and operations perspective. To pass the requirements in this category, bidders had to provide an operation and maintenance plan indicating the project would be operated and maintained in a manner to allow the project to satisfy its contractual commitments, and bidders had to demonstrate the project technology would be able to achieve its operating targets.

For the fuel supply and transportation plan category, bidders of Greenfield Proposals had to provide a preliminary fuel supply plan that described the bidder's plan for securing fuel supply and transportation for delivery to the project. We evaluated the plans for reasonable assurance that the bidder had a plan and the experience necessary to implement the plan for fuel acquisition.

The purpose of the project financial viability MER was to ensure the bidder had the financial backing to construct and operate the project through the

term of the proposal. For Greenfield Proposals, evidence had to be provided that demonstrated the project would be financially viable. All proposals had to demonstrate that the bidder would have sufficient credit standing and financial resources to satisfy its contractual commitments.

The final component for the Minimum Evaluation Requirements applied to Greenfield Proposals only. Bidders of that type had to submit a construction management plan to show that the project could be built in time to serve Florida Power's need.

Q. How were the proposals evaluated with respect to the Minimum Evaluation Criteria?

A. As I mentioned before, the proposals were judged on a "Go"-"No Go" (or Pass-Fail) basis. As discussed in the RFP Document, failure to demonstrate conformance with the MERs would be grounds for elimination from the process. Failing to meet a minimum requirement should result in the elimination of a proposal because it doesn't meet a minimum standard for a good project—one that Florida Power feels has a high probability of being able to get the necessary permits, approvals, financing, etc. to enable the project to be built in time to serve the needs of the Florida Power customers and one that will continue to be able to serve the customers over the term of the proposed contract.

For most of the requirements, the proposals were reviewed to see if they had the documents, schedules, or plans as I discussed above. For example, the fuel supply plan was to provide a description of the fuel delivery system to the

site, the terms and conditions of fuel supply and transportation arrangements, and the status of such arrangements. The project management plan required the bidders to provide a critical path diagram and schedule for the project that specified the items on the critical path and demonstrate that the project would achieve commercial operation by December 1, 2005. For requirements such as these, they either provided the information (and it was judged as acceptable), in which case they would pass; or they didn't provide the information (or it was deemed unacceptable), in which case they would fail. The evaluation teams used their years of knowledge and technical expertise to determine if the information provided was valid.

Q. Did all of the proposals pass the Minimum Evaluation Requirements?

A. All of the proposals, except one, passed the Minimum Evaluation Requirements. Bidder B did not meet the two requirements in the environmental category. In its proposal, Bidder B provided minimal environmental information. No information regarding the site was provided at all, because the site was under negotiation and, due to the nature of the negotiations, Bidder B would not disclose the exact site location.

<u>Evaluation of Technical Criteria</u>

Q. Please explain the results of the second part of the Technical Evaluation, the evaluation of the proposals with respect to the technical criteria, in more detail.

A. With respect to the Technical Criteria, the proposals were ranked relative to each other for each of the criterion. The proposals were evaluated in terms of 14 technical criteria in three major areas: (1) operational quality, (2) development feasibility, and (3) project value. The evaluation criteria contained within these areas were identified in the RFP Document, and are included here as Exhibit ___ (DJR-9). The RFP Document also discussed the purpose of each criterion and Florida Power's preferences.

Q. Please explain the operational quality factors you considered as part of the Technical Evaluation.

A. The criteria that were evaluated in this area included:

- Minimum run-time constraint;
- Start time;
- Ramp rate;
- Maximum starts per year;
- Annual operating hours limit.

In general, these attributes measure the flexibility of the proposed unit to operate in ways that respond to changes in demand. Thus, we evaluated the proposals with respect to how long it would take to get the proposed unit started, how long it would take to get the unit up to the desired output level, how long the unit would have to run once it was started, the number of times in a year the unit could be started and stopped, and the number of hours in a year the unit could operate.

Q. Please explain the factors you considered in development feasibility.

A. This area of evaluation was our judgment of the bidder's ability to bring the proposed unit on line on time. We assessed the developer's plan to obtain the necessary land use and environmental permits, including a water supply, for the proposed project.

Another aspect of project feasibility is the developer's financial viability. We focused on the developer's financial capability and credit. If the bidder was proposing to obtain project financing for its proposal, we would focus on the financial viability of the proposal. If the bidder indicated it would be providing equity to the project or would be self-financing the project, we would also assess the bidder's ability to provide the required equity or financing.

We also evaluated the likelihood of the project coming on line on time by evaluating the developer's planned permitting, licensing, and construction milestone schedules.

Finally we considered the bidder's experience in successfully developing and operating a project of the magnitude proposed.

Q. Please explain the factors you considered in project value.

A. We evaluated five factors that fall within this category:

- Acceptance of key terms and conditions;
- Fuel supply and transportation reliability;
- Impact of a purchased power agreement on the Company's cost of capital;

- Flexibility provisions;
- Reliability assessment.

These are all factors that will ultimately affect the cost and flexibility of the project that we wanted to consider to see if one project provided a clearly better deal.

Q. To what key terms and conditions are you referring?

A. The RFP document included a set of terms and conditions of a power purchase agreement that would be critical to Florida Power. Bidders were instructed to mark the terms and conditions for any changes that they would like to make. We then evaluated the proposals on the extent to which the proposed deal was contingent on changing the key terms and conditions. The terms and conditions are too numerous to detail in my testimony but they cover subjects one would customarily expect to see addressed in a power purchase agreement and, as I mentioned, they were provided to the bidders as an integral part of the RFP.

Q. Didn't you evaluate fuel supply and transportation as part of the Minimum Evaluation Requirements?

A. Yes, we did. As I mentioned before, the MER was that they provide us a preliminary fuel supply plan. Here, we judged the quality of the plans and ranked the proposals relative to each other. We looked at matters such as the quality of the supply acquisition plan, their transportation plan, and the planned physical connection to the plant.

Q. Please discuss your evaluation of the impact of a purchase on the Company's cost of capital.

A. The impact of a purchase from a bidder on Florida Power's cost of capital was a criterion because of the requirement of Rule 25-22.081 for utilities to evaluate this impact if the capacity that is the subject of a Need Determination petition is the result of a purchased power agreement. The RFP requested bidders to provide a discussion of the potential for increases or decreases in Florida Power's cost of capital. Our task in this evaluation was to review and judge the bidders' discussion.

Q. Was an "Equity Penalty" used in your analysis of each proposal?

A. No. However, since most of the bidders said there would be no impact on the cost of capital, we felt we needed to supplement our review of the bidder's discussion to comply with the Rule. The bids were simply ranked based on the fixed costs (in terms of $/kW-yr), the capacity of the project, and term proposed by the bidder.

Q. How did you evaluate the contractual flexibility of each proposal?

A. We considered the extent to which the bidder's proposal offered us flexibility in such areas as the number of years that could be contracted, the possibility of a buyout option, and the bidder's willingness to negotiate changes to other existing contracts with Florida Power. We also considered features of the projects themselves, such as having multiple delivery points, interconnections with more than one pipeline, and whether the project would be dual-fueled.

Q. What did you examine in your reliability assessment?

A. Here we considered the guarantee the bidder offered for the availability of the unit; that is, what percentage of time the bidder would guarantee that the unit would be there if we called on it. Specifically we did this by ranking the bidders based on the equivalent forced outage rate (EFOR) they offered to guarantee.

Q. What did you find in your evaluation?

A. The technical evaluation of the proposals uncovered some issues that needed further clarification from all of the bidders. With one exception, most of the issues were relatively minor. However, Bidder B's proposal had a number of issues that were critical in the areas of environmental permitting certainty, commercial operation date certainty, and financial viability.

Overall, the Greenfield Proposal results were mixed—no proposal was clearly the best proposal for all of the criteria. Furthermore, with the exception of the Bidder B proposal, the quality of each of the proposals was acceptable.

VIII. THE RFP PROCESS: SELECTION OF SHORT LIST

Q. So far, you have explained the Threshold Screening analysis, the initial economic analysis, and the Technical Evaluation. Were you then ready to announce your Short List?

A. Based on the results of the economic screening and optimization analyses, it may have been possible to exclude one or more of the proposals from the Short List

because of cost. However, because of the number of proposals remaining after the threshold screening, we decided not to eliminate any proposal at that point in the evaluation process based solely on economics.

The results of the Technical Evaluation, on the other hand, showed four of the five proposals to be technically viable. As mentioned before, Bidder B's proposal failed to meet two of the Minimum Evaluation Requirements in the environmental category. Furthermore, Bidder B also failed to demonstrate site control and did not provide a transmission plan, both of which were Threshold Requirements. These Threshold Requirements were initially suspended in the hope that Bidder B would be able to provide the required information later in the process. However, by the time the Short List was to be announced, Bidder B could not provide sufficient documentation. Thus, Bidder B was found to be inferior to the other proposals, and was not placed on the Short List.

Q. When did you notify the short-listed bidders of this decision?

A. Bidders C, D, E, and F were notified on April 19, 2002 that they would be placed on the Short List. We officially announced the Short List on April 29, 2002.

Q. Did you tell the short-listed bidders anything else?

A. These bidders were also provided with a list of questions for clarification or additional information derived from the technical evaluation of their proposals. The bidders were given 10 days to provide answers to the questions. At the same time, we informed the bidders that Florida Power was lowering the cost estimate

for Hines Unit 3 and that each of them could submit a revised bid, if they so desired, having full knowledge of the new lower value for the Hines 3 cost estimate. The Company encouraged the bidders to "sharpen their pencils" to see if they could reduce the prices in their proposals. Thus, each bidder on the Short List had an opportunity to beat the final cost estimate of Florida Power's self-build option.

Q. Why did Florida Power lower the cost estimate of Hines 3?

A. At the time the RFP was issued in November 2001, we did not have a detailed construction cost estimate from an EPC contractor. Thus, the costs and operating characteristics provided in the RFP represented the most current information we had at the time the RFP was issued, and were based on current market costs for a combined cycle unit based on "7F" gas turbine technology. After the RFP was issued, we received a detailed construction cost estimate from an EPC contractor based on using the gas turbines for which we held options. The operating costs and characteristics that were provided in the RFP were also revised for a combined cycle unit based on these gas turbines.

Q. Did the bidders have an opportunity to revise their prices?

A. Yes, they did. During the Bidders' Conference held in December, the bidders were told they could come in and lower their prices at any time during the evaluation process. When we provided them the new cost estimates for Hines 3 in April, we again invited the bidders to provide new prices. A 10-day time limit was

established. No bidder revised its prices within that time. However, one bidder (Bidder D) did provide a new price proposal 10 days after the expiration of the 10-day time limit. Despite the untimeliness of the submittal, we used the new prices in our detailed evaluation.

IX. THE RFP PROCESS: EVALUATION – DETAILED EVALUATION

Methodology

Q. Please describe the Detailed Evaluation analysis performed and the results of the analysis.

A. The purpose of the detailed evaluation was to subject the proposals on the Short List to a more detailed assessment and compare them to Florida Power's self-build alternative, Hines 3, incorporating transmission cost impacts based on system impact studies. The detailed evaluation was performed using the most up-to-date information supplied by the bidders on the Short List. The bidders provided responses to the additional questions and clarification requests that, for the most part, pertained to the technical evaluation. However, in some cases, the clarification request included questions on the bidder's pricing proposal. Based on the bidders' responses, adjustments were made to the original pricing proposal to account for costs not included in the pricing sheets of the proposals, such as variable gas transportation costs.

Q. What were the tasks involved in the detailed evaluation?

A. There were three main tasks: finalizing the Technical Evaluation, evaluating the transmission impacts of the proposed plants, and conducting the detailed economic analysis, which included detailed production costing and financial analyses.

Finalized Technical Evaluation

Q. What did you do to finalize the Technical Evaluation?

A. The Technical Evaluation of the proposals was updated based on the responses from the short-listed bidders to the requests for clarification and additional information. The bidders provided additional information that answered most of the Company's questions. However, a few questions remained. Florida Power then held conference calls with three of the four bidders to obtain final clarification on the remaining issues. After taking all the information into consideration, the Company revised the results of the technical evaluation. The Technical Evaluation of the short-listed proposals revealed no "show-stoppers." However, the ranking of the proposals on some of the criteria did change.

Finally, we also performed a self-assessment of Hines 3, and ranked it among the proposals. As can be seen in the final results, shown in Exhibit ___ (DJR-10), Hines 3 ranked either first or second among the alternatives for each of the criteria. An evaluation of Hines 3 determined that it, like the short-listed proposals, would provide satisfactory operational quality. Because the Hines site was originally approved for 3,000 MW of generation and because environmental issues pertaining to development beyond Unit 1 were considered during the

original certification, many initiatives are underway or already completed. Thus, from an environmental perspective, the Hines site ranks highest among the alternatives. Compared to the other bidders on financial viability, Florida Power was ranked second and the same as Bidder F. Because of the existing site, which includes the presence of two gas pipelines, Hines Unit 3 ranks as the best alternative in terms of commercial operation date certainty. Relative to all of the alternatives, Hines 3 compares favorably on fuel supply and transportation reliability because of existing connections with two major pipelines. The Hines 3 unit is considered to have "good" reliability, similar to that of the Bidder D and Bidder F proposals.

Transmission Analysis

Q. Please describe the evaluation of the transmission impacts.

A. Bidders of Greenfield Proposals were required to provide as part of their RFP Response Package detailed information regarding their proposed power plants to enable Florida Power to perform transmission system impact studies. The same types of studies were performed on the proposals as are performed when an IPP developer submits a generation interconnection request to Florida Power through FLOASIS. These studies included load flow, stability, and short circuit analyses and are necessary to determine the impacts on the transmission system of building the proposed power plants at the proposed sites.

In the analyses performed by Florida Power, each proposed plant was placed into the transmission system (Hines 3 was not part of the system

configuration) and the performance of the system with and without the proposed plant was compared. If overload situations were encountered in the simulations, determinations were made as to what actions would be required to integrate the proposed plant into the Florida Power transmission system.

Q. Would any of the proposals require changes to the transmission system?

A. Only Bidder C's proposal required changes to the Florida Power transmission system. The construction cost to integrate the plant into the system was estimated to be $20 million, and these costs were included in the detailed economic evaluation of the proposal.

Q. What kinds of actions were required to integrate the Hines 3 unit into the transmission system?

A. In the final analysis, no changes were required to integrate Hines Unit 3 into the system. At the time the RFP was issued, transmission studies had shown that an upgrade to the Hines-West Lake Wales line, which was already in the transmission plan for 2007, would need to be advanced two years to be in service just prior to the unit coming on line. However, in mid-May the transmission planners determined that this upgrade was no longer required by the installation of the Hines 3 unit. This change was due to the commitment to the construction of a new 27-mile 230 kV line from the Florida Power Vandolah Substation to the FPL Whidden Substation, which is to be in service by the fall 2004. This new transmission line was associated with IPP transmission service contracts.

Specifically, the studies indicated that the installation of the Vandolah-Whidden 230 kV line would push out the need for the Hines-West Lake Wales 230 kV line until at least Summer 2007. As such, the need for the Hines-West Lake Wales 230 kV line was no longer attributable to Hines 3.

Q. Did this change affect any of the proposals?

A. Yes. Bidder D had proposed tying its plant into the Hines substation, thus having much the same impact on the transmission system as building Hines 3. Initially, we anticipated incorporating the same costs we were going to add to the Hines 3 unit into our analysis of Bidder D. However, this change eliminated those costs from Bidder D's proposal also.

Detailed Economic Analysis

Q. Please describe the detailed economic analysis of the proposals you performed.

A. Detailed economic analyses were performed on all of the short-listed proposals and Hines 3. In contrast to the total system revenue requirements calculated by PROVIEW in the optimization analyses, in the detailed economic analysis we calculated the incremental system revenue requirements associated with each alternative.

The first step in the analysis was to perform detailed production costing analyses of the alternatives. Florida Power used the PROSYM model to perform the analyses. PROSYM is a detailed, chronological production costing model

(more detailed than the production costing model used in PROVIEW) that simulates each generating resource on the Florida Power system, both existing and future, and how it is used to serve the forecasted peak demand and energy requirements of Florida Power's customers. Each alternative (i.e., each of the proposals and Hines 3) was modeled as a separate case, which included the alternative and the future units as determined during the optimization analysis. We also modeled a "Base Case," which included a generic combined cycle unit with a December 1, 2005 in-service date. In order to treat all alternatives the same in the economic analysis, all cases were compared to the Base Case. The Base Case and the Hines 3 case were run through 2030, capturing the entire 25-year book life of a combined cycle unit. Since the resource plans reverted to the Base Case at the end of the terms of the proposals, the analysis of each proposal needed to be run only through the end of their respective terms.

Q. Fuel prices are usually a key assumption in these types of analyses. How did you handle fuel price assumptions?

A. We used a combination of an initial price and an index to specify prices for fuel, fixed and variable O&M, and unit starts. Bidders were to provide an initial price (as of January 1, 2002) for each of these items and select an index that would be used to escalate the price they would receive such that it would track the appropriate cost. For evaluation purposes, we provided the escalation assumption in place of the index. Thus, for example, all alternatives using the gas index would escalate at the same rate. For payment purposes, the ratio of the actual

value of the index in the future to the value of the index in January 2002 would be used to escalate the initial price.

Q. Why did Florida Power use such a pricing mechanism as opposed to just assuming all proposals using gas as the fuel have the same gas price forecast?

A. Using an initial price and index mechanism for both evaluation and payment purposes benefits both the customers and the bidders by providing both specificity and flexibility. Bidders were required to "put a stake in the ground" and commit to an initial price (which should have been known or reasonably estimated at the time bids were to be submitted), yet were provided a way to take the guesswork out of trying to determine how costs would escalate in the future. The use of an index would allow a bidder to eliminate inflation and escalation risk from its proposal. If a bidder desired to take on inflation and escalation risk, it could specify a fixed escalation rate. The pricing mechanism employed in this RFP was designed to protect Florida Power's customers and potentially eliminate a certain amount of risk for the bidders. More importantly, this approach would allow a bidder that felt its fuel procurement skills might be better than other potential participants to reflect that expertise in its proposal thereby bringing the value of that skill-set to Florida Power's customers.

Q. How were the results of the production costing analysis used?

A. The results of the production costing analyses were incorporated into the financial analysis of each alternative. In addition to the production costs associated with

each alternative (that is, the energy charges of each proposal and the operating costs of Hines 3), the change in system production costs associated with each alternative, relative to the base case, were also a part of the financial analysis. The analysis must capture these costs because each alternative, due to its size, heat rate, proposed pricing, etc., causes the other resources of the Florida Power generation system to operate in a different manner, resulting in different total system production costs.

Q. Were any other cost impacts included in the analysis?

A. Yes. The fixed costs of the alternatives (that is, the fixed charges of the proposals and the construction costs and fixed O&M costs of Hines 3) were captured in the financial analysis. As mentioned before, each alternative was compared to a Base Case that consisted only of generic future additions; thus, the fixed cost impact of changes to the base case resource plan had to be reflected in the analysis of the alternatives. In the Greenfield Proposals and Hines 3 cases, the changes in the resource plan were similar—they deferred the construction of a generic combined cycle unit until the end of the term of the proposal (or the end of the life of Hines 3). The effect of Bidder E's 200 MW proposal was to advance a combustion turbine unit three years, defer one combined cycle unit one year, and defer another combined cycle unit one year.

The cost impacts of the changes in the resource plan were reflected in the financial analysis by way of an economic carrying charge, which is the same concept as the Value of Deferral used to determine standard offer rates. Because

the proposals had different contract lengths, using an economic carrying charge allows each of the alternatives to be evaluated consistently and eliminates problems associated with "end effects." For the Greenfield Proposals and Hines 3 cases, each received a credit for fixed cost savings equal to the economic carrying charge of a generic combined cycle unit (the unit being deferred in the Base Case) through the term of the proposal being considered. The economic carrying charge captured both the construction costs and fixed O&M costs of the generic combined cycle unit. Bidder E's proposal received similar credits for the deferral of two combined cycle units for one year each; however, the additional cost of advancing a combustion turbine three years was also assigned to the proposal.

Q. What were the results of the analysis?

A. In terms of cumulative present value of revenue requirements, Hines 3 was found to be over $92 million (2002 dollars) less expensive than the least-cost proposal (Bid E). Hines 3 was found to be more than $187 million (2002 dollars) less expensive than the least-cost Greenfield Proposal (Bid D). The charts in Exhibit ___ (DJR-1) show the results of the analysis. The top chart in the exhibit shows the difference in the total cumulative present value of revenue requirements associated with each alternative compared to the Base Case. The bottom chart shows the difference in cumulative present value of revenue requirements compared to the Base Case on an annual basis. The results of the detailed financial analysis of the proposals and Hines 3 clearly demonstrate that Hines 3 is

the most cost-effective alternative for supplying generation to meet the needs of Florida Power's customers.

Sensitivity Analyses

Q. Did you perform any sensitivity analyses?

A. Two sensitivity analyses were performed on the proposals, both of which were done in an effort to make the third-party proposals appear more economically beneficial. One of the analyses was performed on Bid C and one was performed on Bid E.

Q. Please explain the analysis performed on Bidder C's proposal.

A. The sensitivity analysis performed on Bidder C's proposal postulated the effect of a tolling arrangement between the bidder and Florida Power. A tolling arrangement is one in which the party that is going to be taking the output of the plant also provides fuel to the plant. In this analysis, Bidder C's plant was assumed to be treated as a Florida Power asset for the purposes of fuel management. Thus, it was assumed to have the same fuel price as Hines 3 (which was lower than the fuel price quoted by Bidder C) and the same of amount of firm gas transportation was reserved. The result of this analysis lowered the cost of Bidder C's proposal by $63 million. Even with this assumed cost reduction, the cost of Hines 3 is lower than Bidder C's proposal by more than $135 million.

Q. Why was this analysis performed on Bid C? Could a tolling arrangement work for the other Greenfield Proposals?

A. This sensitivity analysis was performed on Bidder C's proposal because they expressed an interest in a tolling arrangement with Florida Power. In theory, similar arrangements could be implemented with the other bidders as well, if both parties saw value in such arrangements. However, the other Greenfield Proposals quoted initial fuel prices that were lower than the fuel prices assumed for Hines 3, so assuming the same fuel prices as Hines 3 would have disadvantaged the other proposals.

Q. What kind of sensitivity analysis was performed on Bid E?

A. The sensitivity analysis performed on Bid E was the result of an alternative energy price forecast provided by Bidder E. In contrast to the Greenfield Proposals whose fuel price was tied to an index, Bidder E proposed a pass-through of the fuel portion of the energy price, based on the bidder's system average fuel and purchased power costs, as approved by the Florida Public Service Commission. Bidder E provided a forecast of its system average fuel and purchased power prices for Florida Power to use in the evaluation process. After Bidder E was placed on the Short List, Florida Power asked it questions regarding the assumptions used in the forecast of its system average fuel and purchased power prices. During this discussion, Bidder E requested to receive the natural gas price forecast Florida Power was going to use in its evaluation of the proposals. Florida Power provided this information to Bidder E. Several days later, Bidder E

provided the Company a new forecast of its system average fuel and purchase power prices that were based on Florida Power's natural gas price forecast. The new prices were approximately 10 percent lower than the original prices. Under the new price assumptions, the value of Bidder E's proposal improved by approximately $2 million, resulting in Hines 3 being more than $90 million less expensive.

Q. Did you perform any sensitivity analyses on Hines 3?

A. Yes, we did. We performed sensitivity analyses on the fixed O&M costs and the construction costs of Hines 3.

Q. Please explain the analyses and the results.

A. The first analysis assumed higher fixed O&M costs for the unit. The exact number of employees Florida Power plans to hire is uncertain at this time. Current expectations are between four and six, and four employees were assumed in the base analysis. Labor costs are the major component of fixed O&M costs. Thus, as a sensitivity, the fixed O&M costs were doubled, which would actually represent adding approximately eight employees. This was done just to be conservative. This assumption resulted in the cumulative present value of revenue requirements increasing by less than $10 million (2002 dollars). This would reduce the advantage Hines 3 has over the next best alternative from $92 million to $83 million.

The second sensitivity analysis assumed that the direct construction costs for Hines 3 were 10 percent greater than expected (approximately $23 million more). This assumption increased the total construction costs of the unit by approximately $26 million, and increased the cumulative present value of revenue requirements by almost $27 million (2002 dollars). This would reduce the advantage Hines 3 has over the next best alternative from $92 million to $65 million.

Assuming that both the fixed O&M costs doubled and the direct construction costs increased by 10 percent, the revenue requirements of Hines 3 would increase by approximately $36 million. This would reduce the advantage Hines 3 has over the next best alternative from $92 million to $56 million. The result of these sensitivity analyses, even when taken together, is that Hines 3 is still the most cost-effective alternative.

Q. Did you perform any other analyses?

A. Yes. We used the goal seek function of Excel to determine what the construction cost of Hines 3 would have to be such that Hines 3 would have the same impact on revenue requirements as the next best alternative. To eliminate the $92 million cost advantage that Hines 3 has over the next best alternative, the direct construction costs of Hines 3 would have to increase more than $79 million, or approximately 35 percent. If fixed O&M costs are assumed doubled, the construction cost of Hines 3 could increase more than $71 million (or 31 percent) and Hines 3 would have the same cost-effectiveness as the next best alternative.

Q. Did this complete your economic analysis of the proposals?

A. Yes, it did.

X. THE RFP PROCESS: SELECTION OF FINAL LIST

Q. What was the final step in the Florida Power RFP process?

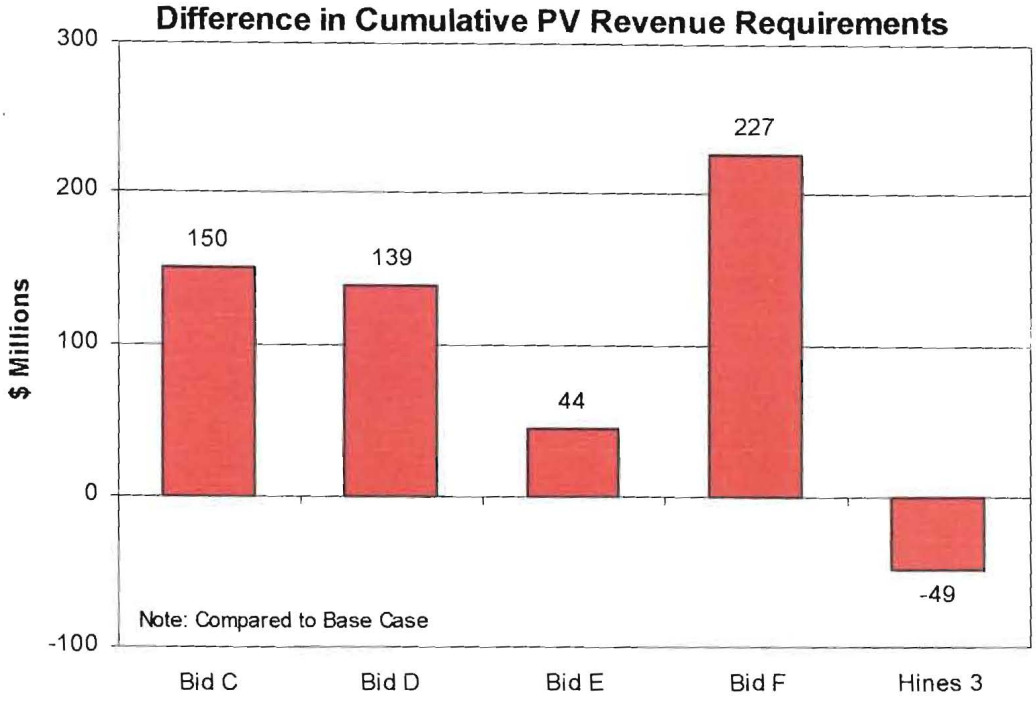
A. The seventh and final step in the process was to select the Final List. However, as discussed previously and as stated in the RFP Document, in the event none of the proposals was clearly superior to Florida Power's self-build alternative, a Final List would not be selected. As I have demonstrated, all of the proposals were clearly inferior to Hines 3, and Hines 3 is the most cost-effective generating alternative. Thus, on June 7, 2002, Florida Power announced that it would build Hines 3 to meet the needs of its customers.

Q. Does this conclude your testimony?

A. Yes, it does.

Exhibit ___ **(DJR-1)**

Results of Detailed Economic Analysis



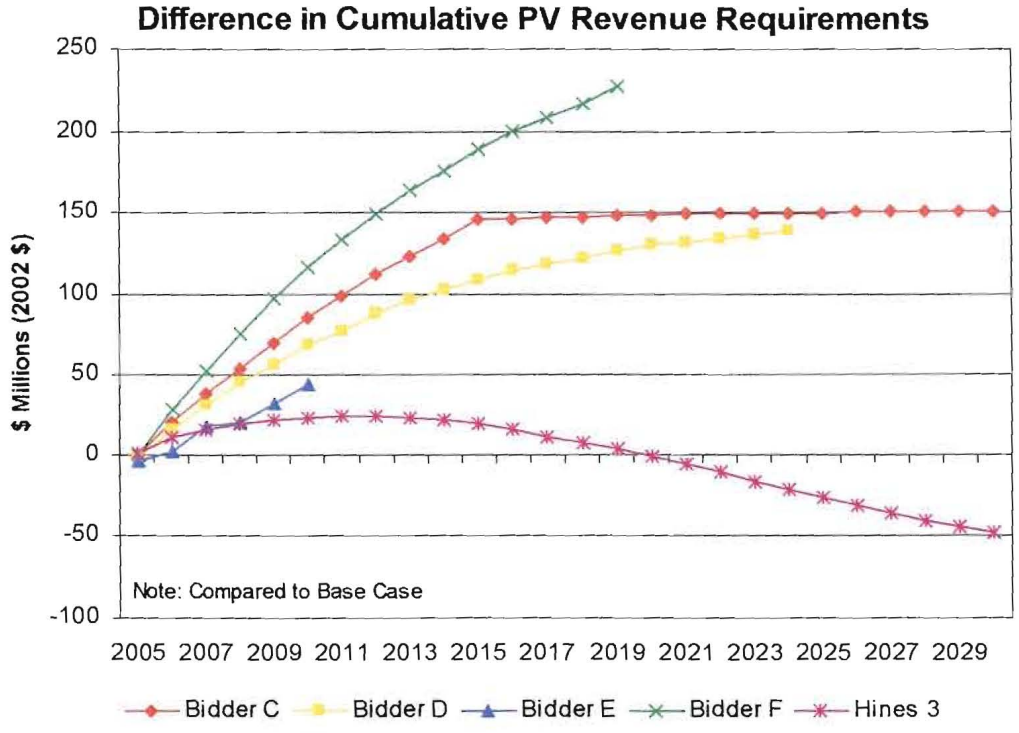


Exhibit ___ **(DJR-2)**

RFP Evaluation Process

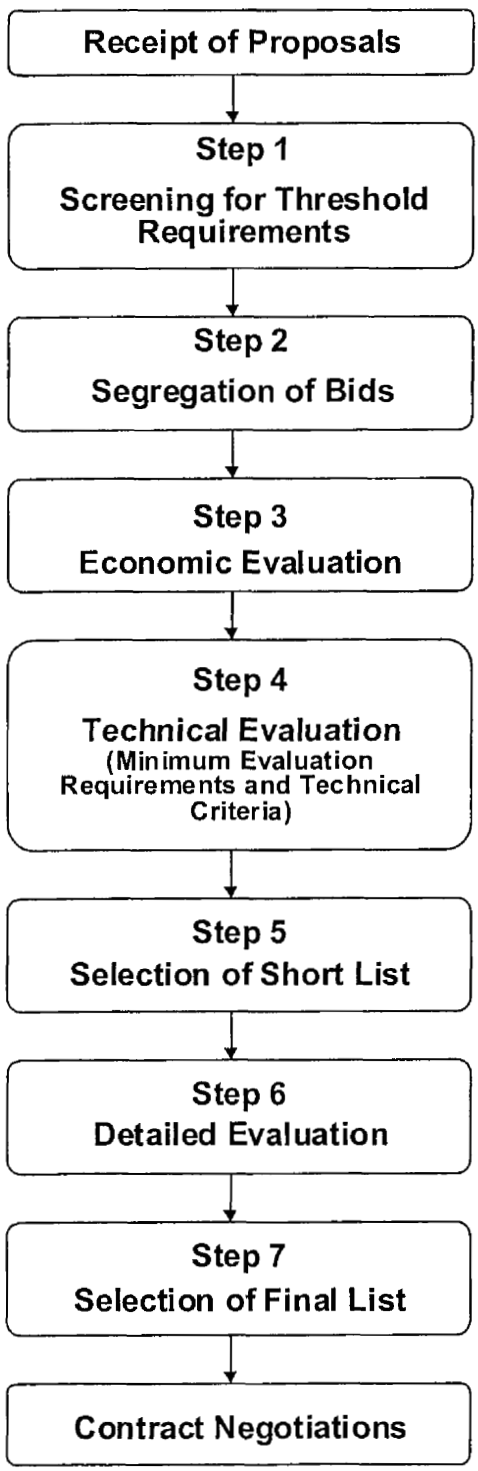


Exhibit ___ **(DJR-3)**

Summary of Proposals

Location (County)	Winter Capacity (MW)	Proposal Type	Technology	Primary Fuel
Bradford	500	Greenfield	Combined Cycle	Natural Gas
Hardee	528	Greenfield	Combined Cycle	Natural Gas
Okeechobee	553	Greenfield	Combined Cycle	Natural Gas
Polk	500	Greenfield	Combined Cycle	Natural Gas
Polk	521	Greenfield	Combined Cycle	Natural Gas
Polk	566	Greenfield	Combined Cycle	Natural Gas
various	200	System	Various	Coal, gas, and oil
various	500	System	Adv. Gas Turbine	Natural Gas

List of Bidders

Calpine Energy Services
CPV Pierce
PG&E Energy Trading - Power
Reliant Energy Power Generation
Sempra Energy Resources
South Pond Energy Park
Tampa Electric Company

Exhibit ___ **(DJR-4)**

Threshold Requirements

A. General Requirements

- The proposal is received on time.
- Complete and credible answers are provided to all questions.
- The proposal submittal fee is included.
- The pricing schedules are properly specified.
- The proper price indices are used.
- Power must be available for delivery under the contract by December 1, 2005.
- The proposed term is for a minimum of five (5) years and a maximum of 25 years.
- For Greenfield Proposals located in Florida, the output of the unit(s) is committed to Florida Power (or other utilities serving retail customers).

B. Operating Performance Thresholds

- If the project is located in Florida Power's control area, the Bidder will be required:
  - to operate the project to conform with Florida Power's ***Voltage Control*** requirements.
  - to operate the project to conform with Florida Power's ***Frequency Control*** requirements.
- Greenfield and Unit Proposals must be ***Fully Dispatchable*** and install ***Automatic Generator Control*** that is tied into Florida Power's Energy Control Center.
- The Bidder must be willing to ***coordinate the project's maintenance scheduling*** with Florida Power.
- Proposals should have a project size of greater than or equal 100 MW and less than or equal to approximately 500 MW.
- System Power Proposals must be ***Fully Schedulable*** (i.e., operate according to a day-ahead schedule but with schedule changes subject to normal utility practices).

C. Contractual Thresholds

- Bidders must agree to each of the Key Terms and Conditions identified in Attachment A.
- For any objections to the Key Terms and Conditions, Bidders must:
  - Identify the language which is objectionable;
  - Provide revised language.

D. Site Control Thresholds [Greenfield Proposals, Unit Proposals]

- Identification of the site location on a USGS map.
- At a minimum, a Letter of Intent to negotiate a lease, for the full contract term or term necessary for financing (whichever is greater), or to purchase the site **[Greenfield Proposals]**. A copy of the title and legal description of the property is required for **Unit Proposals**.

E. Transmission Threshold

- If the project is located outside of Florida Power's control area, the Bidder must provide a transmission plan for wheeling services from those utilities which would be required to wheel the project's power to Florida Power and provide evidence that the host utility is willing to grant Florida Power the right to dispatch the output of Greenfield and Unit Proposals or the right to schedule power from System Power Proposals.
- If the project is located inside of Florida Power's control area, the Bidder must complete a Network Resource System Impact Study data request.

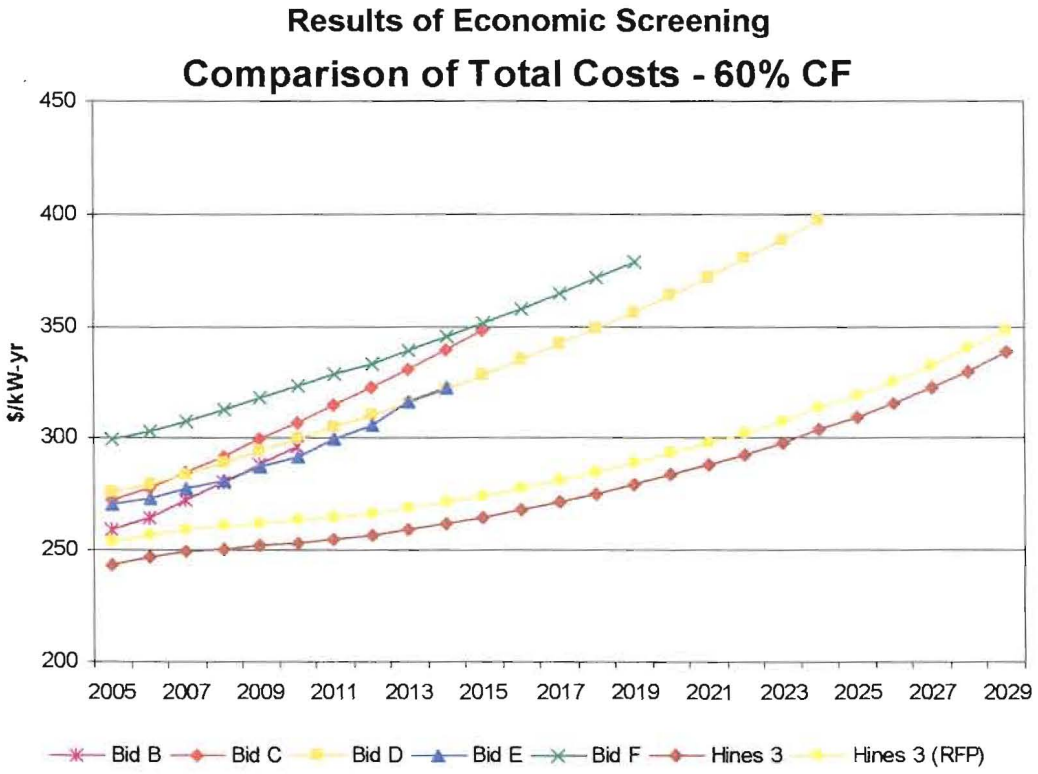
Exhibit ___ **(DJR-5)**

Results of Threshold Screening

	Meets Requirements? Bidder							
	A	B (SP)	B (GP)	C	D	E	F	G
A. General Requirements								
· The proposal is received on time.	Y	Y	Y	Y	Y	Y	Y	Y
· Complete and credible answers are provided to all questions.	N	Y	Y	Y	Y*	Y	Y	N
· The proposal submittal fee is included.	Y	Y	Y	Y	Y	Y	Y	N
· The pricing schedules are properly specified.	N	N	Y	N/Y	Y	N/Y	Y*	N
· The proper price indices are used.	N	Y	Y	N/Y	Y	N/Y	Y	N
· Power must be available for delivery under the contract by December 1, 2005.	Y	Y	Y	Y	Y	Y	Y	Y
· The proposed term is for a minimum of five (5) years and a maximum of 25 years.	Y	Y	Y	Y	Y	Y	Y	Y
· For Greenfield Proposals located in Florida, the output of the unit(s) is committed to Florida Power (or other utilities serving retail customers).	Y*	--	Y	Y	Y	--	Y*	Y
B. Operating Performance Thresholds								
· If the project is located in Florida Power's control area, the Bidder will be required:								
- to operate the project to conform with Florida Power's Voltage Control requirements.	--	--	Y	Y	Y	--	Y	Y
- to operate the project to conform with Florida Power's Frequency Control requirements.	--	--	Y	Y	Y	--	Y	Y
· Greenfield and Unit Proposals must be Fully Dispatchable and install Automatic Generator Control that is tied into Florida Power's Energy Control Center.	Y	--	Y	Y	Y	--	Y	Y
· The Bidder must be willing to coordinate the project's maintenance scheduling with Florida Power.	Y	--	Y	Y	Y	--	Y	Y
· Proposals should have a project size of greater than or equal to 100 MW and less than or equal to approximately 500 MW.	Y	Y	Y	Y	Y	Y	Y	Y
· System Power Proposals must be Fully Scheduleable (i.e., operate according to a day-ahead schedule but with schedule changes subject to normal utility practices).	--	N	--	--	--	Y	--	--
C. Key Terms and Conditions								
· Bidders must agree to each of the Key Terms and Conditions identified in Attachment A to the RFP.	N	Y	Y	N/Y	Y	Y	Y	N
· For any objections to the Key Terms and Conditions, Bidders must:	N	Y	Y	N/Y	Y*	Y	Y	N
· Identify the language which is objectionable;								
· Provide revised language.								
D. Site Control Thresholds [Greenfield Proposals, Unit Proposals]								
· Identification of the site location on a USGS map.	N	--	Y	Y*	Y	--	Y	N
· At a minimum, a Letter of Intent to negotiate a lease for the full contract term or term necessary for financing (whichever is greater), or to purchase the site....	N	--	N	Y	Y	--	Y	N
E. Transmission Threshold								
· If the project is located outside of Florida Power's control area, the Bidder must provide a transmission plan....	N	N	N	--	--	Y	--	N
· If the project is located inside of Florida Power's control area, the Bidder must complete the Network Resource System Impact Study data request.	--	--	--	Y	Y	--	Y	N

* Clarification/additional information needed (and later received)
-- Not applicable to this type of proposal
SP = System Proposal
GP = Greenfield Proposal

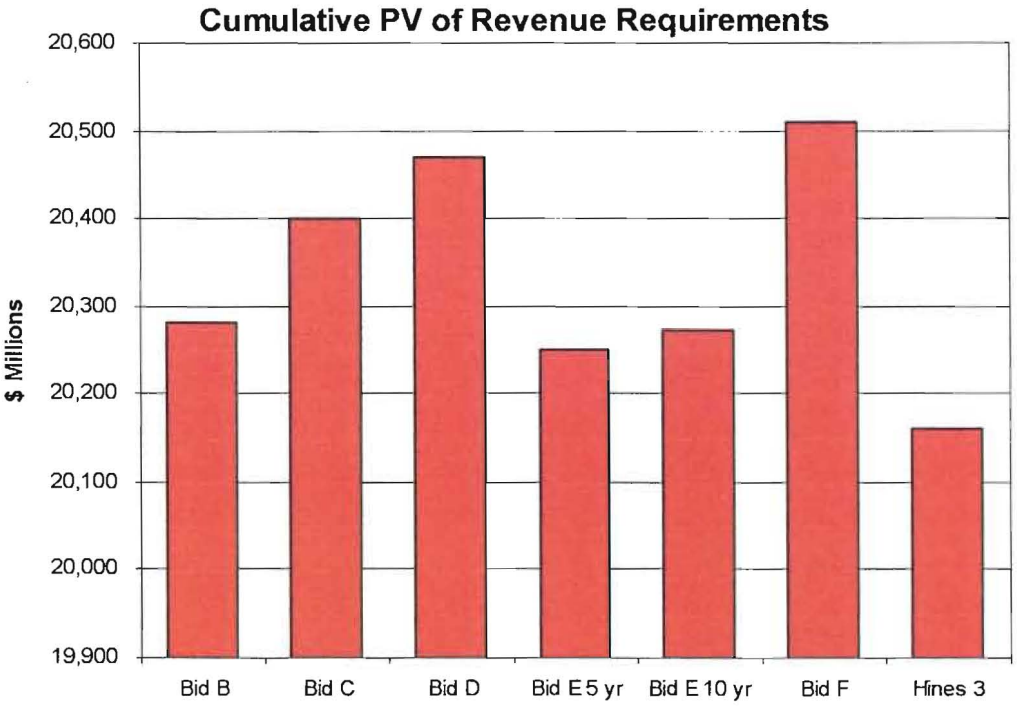
Exhibit ___ **(DJR-6)**



Note: Bidder D price is final, revised price

Exhibit ___ **(DJR-7)**

Results of Optimization Analysis



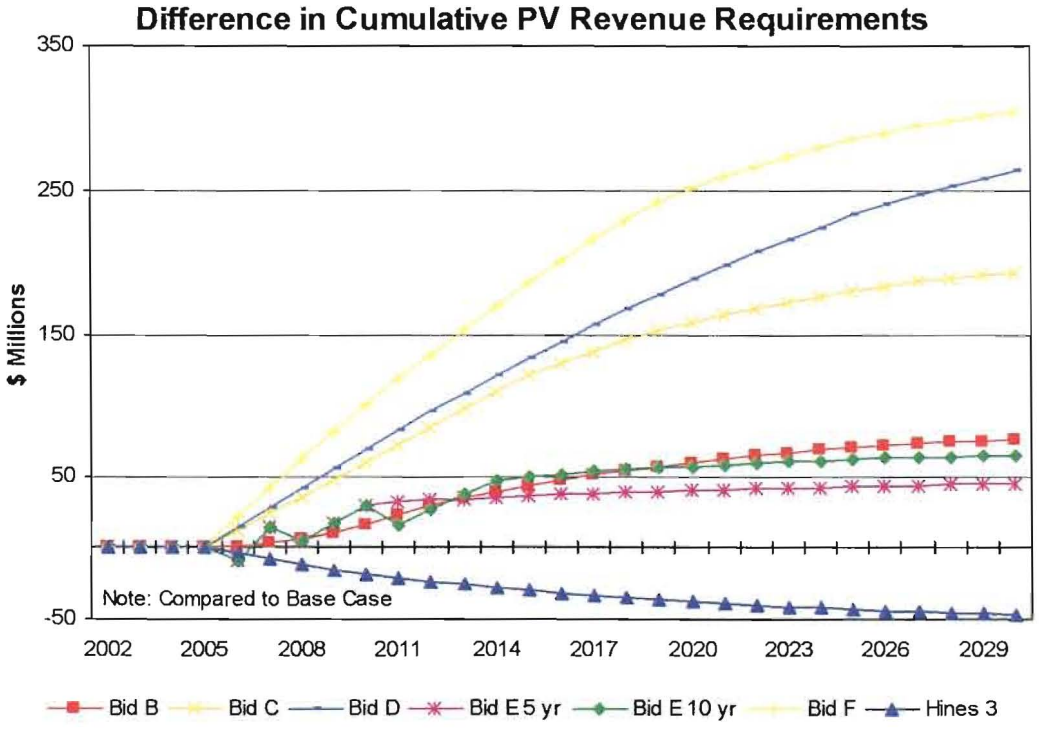


Exhibit ___ **(DJR-8)**

Minimum Evaluation Requirements

A. General Requirements

- Offer is reasonable and bona fide.

B. Environmental

- Preliminary environmental analysis performed and submitted to Florida Power.
- Reasonable schedule for securing permits presented and evidence provided that permits are likely to be secured.

C. Engineering and Design

- Operation and Maintenance Plan provided which indicates that the project will be operated and maintained in a manner adequate to allow the project to satisfy its contractual commitments.
- The project technology will be able to achieve the operating targets specified by the Bidder.

D. Fuel Supply and Transportation Plan

- Preliminary fuel supply plan provided which describes the Bidder's plan for securing fuel supply and transportation for delivery to the project. The plan shall provide a description of the fuel delivery system to the site, the terms and conditions of fuel supply and transportation arrangements, and the status of such arrangements.

E. Project Financial Viability

- For Greenfield Proposals, evidence provided that demonstrates the project is financially viable.
- Demonstration that the Bidder has sufficient credit standing and financial resources to satisfy its contractual commitments.

F. Project Management Plan

- For a Greenfield Proposal, critical path diagram and schedule for the project provided which specify the items on the critical path and demonstrate the project would achieve commercial operation by December 1, 2005.

Exhibit ___ **(DJR-9)**

Technical Criteria

Operational Quality	Development Feasibility	Project Value
♦ Minimum Run-Time Constraint	♦ Permitting Certainty	♦ Acceptance of Key Terms and Conditions
♦ Start Time	♦ Financial Viability	♦ Fuel Supply and Transportation Reliability
♦ Ramp Rate	♦ Commercial Operation Date Certainty	♦ Impact of PPA on cost of capital
♦ Maximum Starts/Year	♦ Bidder Experience	♦ Flexibility Provisions
♦ Annual Operating Hour Limit		♦ Reliability Assessment

Exhibit ___ **(DJR-10)**

Final Results of Technical Evaluation

	Minimum Evaluation Requirements (MUSTS)	**Bid C**	**Bid D**	**Bid E**	**Bid F**	**Hines 3**
A	Offer is reasonable and bona fide	Go	Go	Go	Go	Go
B1	Preliminary environmental analysis is submitted	Go	Go	N/A	Go	Go
B2	Reasonable schedule for permits presented and evidence provided that permits are likely to be secured	Go	Go	N/A	Go	Go
C1	Operation and Maintenance Plan provided adequate to allow the project to satisfy its contractual commitments	Go	Go	N/A	Go	Go
C2	The project technology will be able to achieve the operating targets specified by the Bidder	Go	Go	N/A	Go	Go
D	Fuel Supply and Transportation Plan provided for securing fuel supply and transportation for delivery to the project	Go	Go	N/A	Go	Go
E1	For Greenfield Proposals, evidence provided that demonstrates the project is financially viable	Go	Go	N/A	Go	Go
E2	Demonstration that the Bidder has sufficient credit standing and financial resources to satisfy its contractual commitments	Go	Go	Go	Go	Go
F	For a Greenfield proposal, critical path diagram and schedule provided demonstrating the project would achieve commercial operation by 12/1/05	Go	Go	N/A	Go	Go
Technical Criteria (WANTS)						
1	Permitting Certainty	2	3	N/A	3	1
2	Financial Viability	4	5	1	2	2
3	Commercial Operation Date Certainty	3	3	N/A	2	1
4	Bidder Experience	1	5	1	1	1
5	Impact of PPA	2	3	1	4	N/A
6	Acceptance of Key Terms & Conditions	4	2	1	3	N/A
7	Fuel Supply and Transportation Reliability	4	3	N/A	2	1
8	Minimum Run-time Constraint	1	1	N/A	4	1
9	Start Time	4	3	N/A	1	2
10	Ramp Rate	2	2	N/A	4	1
11	Maximum Starts/Year	1	4	N/A	3	1
12	Annual Operating Hour Limit	1	1	N/A	1	1
13	Flexibility Provisions	5	4	1	2	2
14	Reliability Assessment	5	2	1	4	2