MEMORANDUM

<u>January 8, 1996</u>

TO:	DIVISION OF APPEALS DIVISION OF AUDITING AND FINANCIAL ANALYSIS DIVISION OF COMMUNICATIONS XX DIVISION OF ELECTRIC AND GAS DIVISION OF RESEARCH DIVISION OF WATER AND WASTEWATER DIVISION OF LEGAL SERVICES
FROM:	DIVISION OF RECORDS AND REPORTING (WILLIAMS)
RE:	CONFIDENTIALITY OF CERTAIN INFORMATION
	DOCUMENT NO: 00259-96 Test. of Brian Killian; 00260-96
<u> </u>	xhibit RK-3 and 00261-96 Exhibit RK-5 of Brian Killian
	testimony
	DESCRIPTION: Testimony and Exhibits of Brian Killian
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_	SOURCE: PANDA-KATHLEEN, L.P./PANDA ENERGY CORP. DOCKET NO.: 950110-EI
the at and fo memora of you	The above material was received with a request for entiality (attached). Please prepare a recommendation for torney assigned to the case by completing the section below rwarding a copy of this memorandum, together with a brief ndum supporting your recommendation, to the attorney. Copies recommendation should also be provided to the Division of and Reporting and to the Division of Appeals.
	Please read each of the following and check if applicable.
	The document(s) is (are), in fact, what the utility asserts it (them) to be.

Declassified 8/15/97 950110-EI

FPSC DOCKET NO. 950110-EI EXHIBIT NO. RK-3

DOCUMENT NUMBER-DATE

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210483

493 FPSC-RECORDS/REPORTING

Docket No. 911142-EQ
Florida Power Corporation
A. J. Honey
Exhibit(AJH 1)

EVALUATION OF

STANDARD OFFER PROPOSALS

by

FLORIDA POWER CORPORATION COGENERATION DEPARTMENT

Docket 95-0110-EI

RALPH KILLIAN

Exhibit No. RK-3

November, 1991

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RALPH KILLIAN

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Category	Weighting	
1. Location -	10%	
2. Feasibility -	40%	
a. Host		
b. Permits		
c. QF Status		
d. Fuel Transportation		
3. Reliability -	30%	
a. Availability		
b. Technology Type		
c. Fuel Diversity		
4. Developer Qualifications	10%	
5. Size -	10%	

Projects were rated in all categories and subcategories with a rating of very good (1), good (0) or poor (-1). This evaluation method provided a fair, simple and accurate foundation for our decision. The scores were then totaled to obtain the following results:

Panda Kathleen L.P. (Panda)	6
Destec Energy Inc. (Dow)	4
Sparrow (Charon Corp.)	3
Noah IV (Ark Energy/CSW)	1
Nordic Power of Haines City (Nordic)	1
Village Power Corporation South (Westinghouse)	1
Village Power Corporation East (Westinghouse)	0

A higher score is reflective of a more developed project. This evaluation showed that Panda is more likely to successfully avoid the construction of the 1997 combustion turbine unit as specified in the contract. Thereby protecting our customers and possibly avoiding expensive replacement power. As a result, FPC selected the Standard Offer Contract with Panda and rejected the others.

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The highlights of the Panda Project are:

Panda Kathleen L.P.
Committed Capacity of 74.9 MW
In Service Date of 4/1/95 (21 months early)
30 year contract term
Located west of Lakeland
Erly Juice, a citrus processor
Natural gas, combined cycle facility

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RALPH KILLIAN

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BACKGROUND

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The implementation of the rules for cogeneration and small power production of the "Mini-APH" hearings, Docket #910004-EU, determined the avoided un Standard Offer Contract. The avoided unit was defined to be a 1997, 150 MW turbine of which 80 MW was allocated to the Standard Offer Contracts.

Florida Power Corporation submitted its proposed Standard Offer with payme based on a combustion turbine facility or a coal fired facility.

In the "Mini-APH" hearings, the FPSC ordered that a Standard Offer Contract be to exclude both the "regulatory out" clause and the coal payment option. The effect of the Standard Offer was ordered to be September 20, 1991.

Subsequent to the hearing, the company revised the Standard Offer Contract in acc with the FPSC Order. Final word was received on September 12, 1991 concert acceptance of the changes to the Standard Offer Contract. Over 80 copies of the S Offer Contract were mailed to those who requested a copy and to those having ex interest in QF development in the recent past. A copy of the contract is included in IX.

The Standard Offer Contract only applies to qualifying facilities less than 75 MW o solid waste facilities less than 80 MW (FPSC Rule 25-17.0832(3)(a)). None of the projection involved solid waste facilities (FPSC Rule 25-17.091), thereby, making the limit 75 FPC determined that this size limit was intended to be applied to their committed cal or the net generation. One developer, Sparrow, submitted a proposal for 75 MW which promptly modified to 74.999 MW to comply with the FPSC rules.

Per FPSC Rule 25-17.0832(2) *Negotiated contracts shall not be evaluated against an aveunit in a standard offer contract,..." There were two contracts submitted by CRSS we contained changes requiring negotiations. These two contracts were therefore excluded for this evaluation of standard offer contracts.

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OPEN SEASON

Previously the commission had used informal rules when standard offer contracts applied to a statewide avoided unit. This was necessary due to the subscription limit being applicable to multiple utilities. These utilities had no guidelines to coordinate their subscriptions against the avoided unit and these rules avoided oversubscription. The commission had attempted to formalize rules for prioritizing standard offer contracts. Action was differed when the rules were changed from a statewide avoided unit to individual utility units. This allows individual utilities to determine their own method of prioritizing standard offer contracts

Florida Power Corporation has observed the confusion and problems related to awarding Standard Offer Contracts on a "first come, first served" basis. In order to avoid such confusion and ill-considered or incomplete contracts, Florida Power established the "open season" concept.

Another reason for using an "open season" was the limited time between final approval and the effective date of the contract. The final version of the contract was approved on September 12, 1991 and was previously ordered effective September 20, 1991. This would require the potential QF's to determine the acceptability of the final version of the contract and deliver an executed contract in less than a week. The two week open season allowed for additional discussion with those developers considering signing a Standard Offer Contract. This additional time also avoided only testing who can deliver a document first.

Discussions were held with the FPSC staff to determine if any objections existed and to insure no rules or conventions were violated in establishing the two week "open season". It was agreed that while informal rules have existed on establishing the priority of contracts, the current rules are silent on this issue.

The value of the "open season" became apparent when one of the earlier submitter's was able to correct part of their submission that would have invalidated the contract. Some developers avoided submittal errors by calling FPC while others decided not to submit contracts after inquiring about the final form of the contract.

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RANKING CRITERIA

The rankings of the standard offer responses received between September 20, 1991 and October 4, 1991 are based on five categories. A copy of the letter to FPC's file is provided in the appendix. These categories were established to be:

- 1. Location
- 2. Feasibility
- 3. Reliability
- 4. Developers Qualifications
- 5. Size

Reliability and feasibility are important and complex criteria. Therefore, these categories were further broken down into subcategories.

The following describes each of the categories and subcategories.

1. Location

In some cases, projects located at particular points in the company's service territory might provide benefits, such as voltage support, that otherwise would not be present. In other cases, projects located in certain areas could be somewhat more costly to accommodate. An example would be if they increased power flows over already heavily loaded transmission lines.

2. Feasibility

Feasibility was broken into the following four subcategories:

a. Host

The identification and securing of a host provides an indication of the state of development of a project. A more developed project is more feasible because there are fewer uncertainties. A less secured host could be an indication of a premature project.

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4. Developers Qualifications

Due to the complexity of a QF project, the qualifications of a developer could become a concern. Experience in this type of development increases the rate of success.

5. Size

The size of the facility is important because on average, the availability of a number of small facilities is better than the availability of one large facility.

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RANKING METHODOLOGY

All categories and subcategories were given a score of 1, 0, or -1, with 1 meaning very good, 0 meaning good and -1 meaning poor. All categories and subcategories were equally weighted. The proposal with the highest total score was considered the most likely to successfully avoid the 1997 combustion turbine unit.

The following is the method was used for determining the scores for each of the categories and subcategories.

Location

- Very good location. The interconnection has positive consequences and/or improves capacity in an existing load center substation. It has specific characteristics which may avoid future transmission limitations, delay expansions, or provide other economic or reliability benefits.
- Good location. The project can be easily interconnected to a transmission substation. It has no negative consequences to system reliability. These QFs do not significantly harm or benefit the transmission grid or these factors mitigate each other.
- The project involves significant or complex interconnection or could adversely affect the system reliability adding burden on limited FPC resources. The project may involve constructing extensive lines and/or negatively impacting the transmission grid.

Host

- 1 A letter of intent with an existing steam host has been provided.
- The host has been identified, but no letter of intent was provided.
- -1 The host was not identified or is unknown.

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Technology Type

- The technology proposed involves a well proven configuration of equipment for the given application.
- This project involves the adaptation of proven technology.
- -1 This project involves the use of unproven technologies.

Fuel Diversity

- The proposed fuel type is significantly different from other FPC fuel types making FPC less dependent on any single source of fuel.
- The proposed fuel is similar to FPC's current fuel types that are not in high demand and under foreign control.
- -1 The proposed fuel is in high demand and under foreign control (i.e. oil).

Developers Qualifications

- 1 FPC is satisfied with the developer's experience.
- 0 FPC has limited concerns with the developer's experience.
- -1 Concerns exist with the developer's experience and ability to meet their obligations.

Size

- 1 Small, less than 25 MW.
- 0 Moderately sized facility 25-50 MW.
- -1 Larger sized facility 50-75 MW.

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SUBMITTALS

A request for information was sent to each of the company's we received Standard Offer Contracts from, except one. CRSS had two contracts which contained changes requiring negotiations. FPSC Rule 25-17.0832 (2) excludes negotiations against standard offer subscription limits. We requested replies from the seven respondents by October 25, 1991. A copy of the letter is provided in Section X.

The responses had many striking similarities. Sparrow proposed a simple cycle, natural gas unit and Nordic proposed a steam turbine fueled by orimulsion, a fuel oil substitute from Venezuela. The other five respondents proposed natural gas combined cycle units. All of the Standard Offers were in locations that would not restrict transmission import capacity into the state.

Of the seven valid Standard Offers, the committed capacities ranged from 65 to just under 75 MW. The subscription limit was 80 MW restricting the selection to only one of the seven contracts. The following pages summarizes each of the submittals.

The characteristics described below provide an outline for the following project summaries.

Size - The capacity committed to in the contract

Location - The coordinates identified in the contract

Interconnection - The expected point of interconnection with FPC's system

Steam Host - The proposed steam host required to obtain QF status

In-Service Date - The Commercial In-Service Date specified in the contract

Payment Option - Specifies which of the four capacity payment options was selected in the contract. The four payment options include normal, levelized, early, early levelized.

Contract Term - The duration of the contract

Type of System - The type of technology that was proposed

Fuel Type - The proposed fuel type and expected method of delivery

Developer Qualification - The qualifications of the organization providing the proposal

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NOAH IV

SIZE:

70 MW

LOCATION:

Section 20,26-29, Township 22

South, Range 26 East

INTERCONNECTION:

Clermont East Substation

STEAM HOST:

Non Existing, Unidentified

CO₂ Facility

IN-SERVICE DATE:

1-1-97

PAYMENT OPTION:

Normal

CONTRACT TERM:

30 Years

TYPE OF SYSTEM:

Combined Cycle

FUEL TYPE AND TRANSPORTATION:

Natural Gas. FGT Phase III Indicated But Not Secured

DEVELOPER QUALIFICATIONS:

Ark Energy and CSW Have Had Experience In

Cogeneration

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PANDA ENERGY

SIZE:

74.9

LOCATION:

Section 20, Township 28

South, Range 23 East

INTERCONNECTION:

Lakeland West or Proposed

Lakeland South Substation.

STEAM HOST:

Erly Juice, a Citrus Processor,

Letter Of Intent Provided.

IN-SERVICE DATE:

4-1-95, 21 Months Early

PAYMENT OPTION:

Early

CONTRACT TERM:

30 Year

TYPE OF SYSTEM:

Combined Cycle

FUEL TYPE AND TRANSPORTATION:

Natural Gas, FGT Phase III Transportation Secured

DEVELOPER QUALIFICATIONS:

Panda Has Had Experience As The Prime Developer Of

QF Projects

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VILLAGE POWER EAST

SIZE:

65 MW

LOCATION:

Section 1, Township 24 South,

Range 31 East

INTERCONNECTION:

Rio Pinar-Wewahootee 69 KV

Line

STEAM HOST:

No Steam Identified

IN-SERVICE DATE:

1-1-97

PAYMENT OPTION:

Levelized

CONTRACT TERM:

20 Years

TYPE OF SYSTEM:

Combined Cycle

FUEL TYPE AND TRANSPORTATION:

Natural Gas, FGT Phase III Indicated But Not Secured

DEVELOPER A QUALIFICATIONS:

Westinghouse Is Believed To Have The Needed Experience

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LOCATION

Destec

SCORE:

1 (Very Good)

Destec would require a short 115 KV radial feed and will provide a set for Rockland Substation. Rockland Substation is in proximity with Fo major transmission substation, which makes this site an excellent interconnection. Any interruptions caused by the QF will be isolated industrial customer.

Noah IV

SCORE:

0 (Good)

Noah IV would require a short 69 KV line to interconnect to Clerm Substation, a moderate load center serving primarily retail customers.

Nordic

SCORE:

0 (Good)

Nordic would require a short 69 KV line into Haines City Substation, a moload center serving primarily retail customers.

Panda

SCORE:

0 (Good)

We would require interconnection at Lakeland West or the proposed Lakeland S Substation, which is different than the proposal. This provides good access to transmission grid but is away from load centers. Panda proposed an interconnect with the 230 KV Kathleen-Barcola line. This would unacceptably effect the reliable of this critical transmission line.

Sparrow

SCORE:

1 (Very Good)

Sparrow would require a short 69 KV line to the Woodsmere Substation, a major load center serving primarily retail customers.

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HOST

Destec

SCORE:

0 (Good)

An International Fertilizer Company was identified, but not by name. No letter of intent was provided. Destec is still negotiating with the proposed host.

Noah IV

SCORE:

-1 (Poor)

Food grade CO₂ was generically mentioned as a host. There is a demand for food grade CO₂ in Florida but the proposed facility does not yet exist. Competition for the food grade CO₂ market raises concerns over the stability of the steam host.

Nordic

SCORE:

1 (Very Good)

A letter of intent was provided by Haines City Growers. Haines City Growers is expected to be a stable steam host.

Panda

SCORE:

1 (Very Good)

A letter of intent was provided by Erly Juice. Erly Juice is expected to be a stable steam host.

Sparrow

SCORE:

0 (Good)

A letter of intent was provided by Thermice to build a food grade CO₂ facility. Competition for food grade CO₂ market raises concerns over the stability of the steam host.

Village Power (East)

SCORE:

-1 (Poor)

No steam host was secured or identified.

Village Power (South)

SCORE:

-1 (Poor)

No steam host was secured or identified.

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QF STATUS

Destec

SCORE:

0 (Good)

A prospective host is believed to be available with the steam use required to maintain QF status.

Noah IV

SCORE:

0 (Good)

The prospective host is believed to provide stable steam use, but is not existing.

Nordic

SCORE:

1 (Very Good)

Haines City Citrus Growers requirements for process steam is expected to be adequate for QF status and is considered stable.

Panda

SCORE:

1 (Very Good)

Erly Juice requirements for process steam use is more than adequate to meet QF status. This host is considered stable.

Sparrow

SCORE: 0 (Good)

The prospective host is believed to provide stable steam use, but is not existing.

Village Power (East)

SCORE:

0 (Good)

No steam host was provided but adequate availability is indicated.

Village Power (South)

SCORE:

0 (Good)

No steam host was provided but adequate availability is indicated.

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Village Power (East)

SCORE:

0 (Good)

Fuel transportation for FGT Phase III was indicated. While transportation is expected to be available, it has not yet been secured.

Village Power (South)

SCORE:

0 (Good)

Fuel transportation for FGT Phase III was indicated. While transportation is expected to be available, it has not yet been secured.

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TECHNOLOGY TYPE

Destec

SCORE:

I (Very Good)

Well proven combined cycle technology was proposed.

Noah IV

SCORE:

1 (Very Good)

Well proven combined cycle technology was proposed.

Nordic

SCORE:

0 (Good)

The proposed facility utilizes well proven steam turbine technology in a less proven application.

Panda

SCORE:

1 (Very Good)

Well proven combined cycle technology was proposed.

Sparrow

SCORE:

1 (Very Good)

Well proven simple cycle technology was proposed.

Village Power (East)

SCORE:

1 (Very Good)

Well proven combined cycle technology was proposed.

Village Power (South)

SCORE:

1 (Very Good)

Well proven combined cycle technology was proposed.

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DEVELOPER QUALIFICATIONS

All Respondents

SCORE:

1 (Very Good)

There were no specific concerns with any of the developers who submitted contracts. All submittals were from developers who had prior experience in generation. All developers were given a very good rating.

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DEVELOPER QUALIFICATIONS

All Respondents

SCORE:

1 (Very Good)

There were no specific concerns with any of the developers who submitted contracts. All submittals were from developers who had prior experience in generation. All developers were given a very good rating.

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