

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

TESTIMONY OF RALPH KILLIAN

ON BEHALF OF PANDA-KATHLEEN, L.P.

DOCKET NO. 950110-EI

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1			TESTIMONY OF RALPH KILLIAN
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4			
5	I.	INTR	ODUCTION AND QUALIFICATION
6		Q.	Please state your name, profession, and business
7			address.
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9		Α.	My name is Ralph Killian. I am the Senior Vice
10			President of Panda Energy International, Inc. Panda
11			Energy International, Inc. is engaged in the
12			development and operation of cogeneration facilities.
13			Panda-Kathleen, L.P. ("Panda") is engaged in the
14			development of a qualified cogeneration facility in
15			Lakeland, Florida pursuant to a contract between Panda
16			and Florida Power Corporation ("Florida Power"). My
17			business address is 4100 Spring Valley, Dallas, Texas
18			75244.
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20		Q.	State briefly your educational and professional
21			background.

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I earned a B.S. degree in chemical engineering from the 2 Α. 3 University of Florida in 1969. From 1969 to 1988, I held various engineering staff and management positions at AMOCO Production Company. From 1988 to 1989, I was 5 6 Senior Vice president of Texas Eastern Gas Pipeline Company, where I was responsible for all marketing, 7 8 supply and transportation for the Texas Eastern interstate natural gas pipeline serving the northeast 9 10 United States.

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Q. On whose behalf are you appearing in this proceeding?

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A. I am appearing on behalf of Panda-Kathleen, L.P.

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Q. Please describe your duties with Panda Energy
International, Inc.

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A. I am the Senior Vice President of Panda Energy
International, Inc.. I am responsible for business
development, sales, project development, fuel

procurement and management, and certain other
functions. I had, and continue to have, overall
responsibility for the Panda-Kathleen, L.P. project,
among other matters. I have been with Panda Energy
International, Inc. and its predecessor, Panda Energy
Corporation, since 1989.

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8 Q. Have you ever testified before the Florida Public
9 Service Commission?

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11 A. No, I have not.

#### II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

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The purpose of my testimony is to state the facts 4 Α. underlying Panda's contract with Florida 5 Corporation, obligating Panda to furnish wholesale electric power for 30 years at a net 74.9 MW or greater 7 of capacity, under all operating conditions, 8 obligating Florida Power to purchase that power at 9 rates as calculable in the contract. My testimony will 10 also state the facts of Panda's discussions with 11 Florida Power Corporation from 1991-1995 relating to 12 these contractual issues. 13

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Q. Are you sponsoring an exhibit in this case?

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17 A. Yes. It consists of seventeen documents.

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Document No. 1 is a Standard Offer Contract

Questionnaire Panda received from Florida Power in

September 1991.

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2	•	Document No. 2 is Panda's response to that
3		questionnaire, which it delivered to Florida Power in
4		October 1991.
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6		Document No. 3
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9 .		Document No. 4 is a Florida Power document entitled
10		"Negotiated Contract For The Purchase Of Firm Capacity
11		And Energy From A Qualifying Facility," which was
12		provided to Panda in February 1991.
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1,4		Document No. 5
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16		Document No. 6 is Panda's Quarterly Progress Report to
17		Florida Power, dated June 20, 1994.
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19		Document No. 7 is a June 23, 1994 letter from Ted
20		Hollon to David Gammon.

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1	•	Document No. 8 is a July 27, 1994 letter from Ted
2		Hollon to David Gammon.
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4		Document No. 9 is an August 3, 1994 letter from David
5		Gammon to Ted Hollon.
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7		Document No. 10 is an August 8, 1994 letter from Ralph
8		T. Killian to David Gammon.
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10		Document No. 11 is an August 10, 1994 letter from Kyle
11		Woodruff to Robert D. Dolan.
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13		Document No. 12 is an August 23, 1994 letter from
14		Barrett G. Johnson to Joseph D. Jenkins of the Florida
15		Public Service Commission.
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17		Document No. 13 is an August 24, 1994 letter from
18		Joseph Jenkins of the Florida Public Service Commission
19		to Barrett Johnson.
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1		Document No. 14 is Robert D. Dolan, "Financial
2		Incentives For Power Purchases: A Utility's View,"
3		presented at the Gulf Coast Cogeneration Association,
4		1992 Spring Meeting, held April 21, 1992.
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6		Document No. 15 is an April 29, 1993 letter from Robert
7		Dolan to Mark Bentley, extending the milestone dates
8		under the contract.
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10	III. THE	CONTRACT BETWEEN PANDA AND FLORIDA POWER CORPORATION
Ll	Q.	Please describe the process by which Panda responded to
12		Florida Power Corporation's Standard Offer Contract
13		Questionnaire in October 1991.
14		
15	Α.	In September 1991, Panda received a Standard Offer
16		Contract Questionnaire from Florida Power (attached
17		hereto as "Exhibit 1"). Among the questions posed in
1.8		that questionnaire was the committed capacity of a
19		Panda facility. When Panda responded to that
20		questionnaire in October 1991 (attached hereto as

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1.		"Exhibit 2"), it offered to provide Florida Power with
2		74.9 MW of committed capacity for a thirty-year term.
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4	Q.	Was Panda successful in its bid for the Florida Power
5		Contract?
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7	Α.	Yes. After reviewing Panda's response and the
8		responses of six other bidders, Florida Power chose to
9		contract with Panda. On November 19, 1991 and on
10		November 26, 1991, Florida Power petitioned the Public

Service Commission for authority to refuse standard

offer contracts from cogenerators other than Panda.

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On October 22, 1992, the Commission granted 14 petition, finding that "Florida Power Corporation acted 15 in the best interests of the ratepayers to select the 16 contract which after a comparative evaluation was 17 deemed by FPC to be the best available. We find that 18 this action is consistent with the language of Rule 25-19 17.0832(3)(d), F.A.C." Order Granting Petition For 20

- 8 **-**

Authority For Florida Power Corporation To Refuse All

Ţ		Standard Offer Contracts Except That Submitted By Panda
2		Kathleen, L.P. ("Order") at 3.
3		
4	Q.	What obligations did the Panda-Florida Power contract
5		impose on the parties with respect to the capacity of a
6		facility?
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8	Α.	The contract discussed capacity in several paragraphs.
9		Among these references were the following:
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11		(a) Paragraph 1.9 defined committed capacity as
12		the "KW capacity, as defined in Article VI hereof,
13		which the QF has agreed to make available on a firm
14		basis at the Point of Delivery.
15		
16		(b) Paragraph 2.1 limited the availability of the
17		Agreement to the available capacity limitations
18		described in Schedule 1 of Appendix C and being either
19		a solid waste facility or a facility having a Committed
20		Capacity of less than 75,000 KW.
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1	(c) In Paragraph 6.1, Panda committed to sell and
2	arrange for the delivery of the Committed Capacity to
3	Florida Power Corporation. Further in that Article,
4	Florida Power contracted to purchase the Committed
5	Capacity made available to it at the Point of Delivery.
6	In addition, in the last sentence of that Article,
7	Panda agreed to sell and deliver or arrange for
8	delivery of the electric energy to the company and
9	Florida Power Corporation agreed to purchase such
10	electric energy as is made available for sale and
11	received by it at the Point of Delivery.
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13	(d) Paragraph 6.2 states that the Committed
14	Capacity and electrical energy made available to

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(e) Schedule 4 of Appendix C refers to a multiplier for the On-Peak Capacity Factor ("OPCF") which must be greater than or equal to the Committed

Panda's side of the Point of Ownership.

Florida Power shall be net of any electrical energy on

OPCF, clearly recognizing that on-peak capacity would be greater than the Committed Capacity.

capacity as referred to in Paragraphs 6.1, 6.2 and 6.3 are clearly contemplated by Schedule 5 of Appendix C, which describes an optional payment plan for such excess energy sales. Appendix C encouraged Panda to participate in this payment plan by providing such excess energy for sale to Florida Power. While Panda did not elect this payment program, the fact remains that the availability of such a program would serve no purpose absent the availability of energy production in excess of the committed capacity, and Florida Power's obligation to purchase that excess energy.

Q. How did the Panda-Florida Power contract bind the parties to an express contract length?

20 A. Article 4.1 shows the term of the Agreement beginning
21 on the execution date (November 25, 1991) and

terminating on the last day of March 2025. Florida

Power acknowledged this in its November 1991

"Evaluation Of Standard Offer Proposals," (attached hereto as "Exhibit 3"), repeatedly describing the contract term as 30 years. This document was submitted to the Commission by Florida Power in its petition for authority to refuse standard offer contracts from cogenerators other than Panda, and was admitted as Exhibit 1 in that proceeding.

Q. Did Panda understand the term "committed capacity" to be synonymous with the net size of the plant?

A. At no time did Panda ever understand committed capacity to be synonymous with net size. The contract does not state a net size limitation, and moreover, Florida Power never indicated to Panda that it understood that the term "committed capacity" represented a 74.9 MW absolute size limitation. At all times, as described below, Florida Power Corporation's representatives were in accord with the irrefutable engineering realities

that to produce 74.9 MW of committed capacity, under all conditions, a facility must have a net capacity greater than 74.9 MW. From the very beginning of the contracting process, in responding to a questionnaire that Florida Power sent to Panda inviting submission of a contract proposal, Panda indicated that its equipment choice at that time was three Stewart & Stevenson/GE LM 2500 turbine generator sets. Such equipment, with a heat generator and steam turbine-generator would be capable of producing at least 87-95 MW at 59° F.

Q. You referred to irrefutable engineering realities relevant to the capacity of a generator. What do you mean by that?

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There are a variety of factors that affect the actual 5 Α. output of a generator. A generator's actual output 6 varies, depending on (a) the frame size, (b) age, (c) 7 maintenance, (d) ambient air temperature, (e) humidity, 8 9 (f) elevation above sea level, (g) BTU rating of the fuel from time to time, (h) condenser cooling water 10 temperature, and many other factors. It ignores these 11 realities to speak of a generating unit as having a 12 specific capacity without defining all the variable 13 conditions. It also follows that the capacity of a 14 generating unit will vary with changes in these 1.5 variables. As a practical matter, to comply with its 16 contractual commitment to produce the committed 17 capacity for thirty years during summer conditions or 18 environmental conditions 19 other challenging complying with Florida's strict emissions regulations, 20 Panda had to be acutely sensitive to each of these 21

variables during the process of selecting an appropriate equipment configuration.

#### IV. "STANDARD OFFER" CONTRACTS AND "NEGOTIATED" CONTRACTS

Q. What experience did Panda have with the contractual provisions in Florida Power's "negotiated" contracts?

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In January and February 1991, Panda participated in the Α. process by which Florida Power selected a "negotiated contract" for the purchase of firm capacity and energy from a qualifying facility. See "Negotiated Contract For The Purchase Of Firm Capacity And Energy From A Qualifying Facility (attached hereto as "Exhibit 4"). This process contained no true negotiation, rather consisting of Florida Power providing qualifying facilities ("QF") with proposed contracts and then soliciting suggestions from those QF's. Florida Power then reviewed the suggestions and decided which it would accept. Those accepted suggestions suggestions, and any other new provisions that Florida Power decided to incorporate, were incorporated into

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all contracts, standardizing the "negotiated contract."

In those discussions, Panda was told by Florida Power 1 that there would be no negotiation of contract terms, 2 and "negotiated contracts" containing changes when 3 returned by QF's to Florida Power would be disfavored. 4 5 I have since learned that the "negotiated contract" and 6 the standard offer contract were developed by Florida 7 Power from a "model contract." Hence, 8 unsurprising that striking 9 there are 50 many similarities in the provisions of those contracts, 10 especially those provisions relevant to this dispute. 11 12 13 PANDA'S DILIGENT ATTEMPTS TO MEET THE IN-SERVICE DATE 14 What did Panda personnel do to meet the in-service date 15 set forth in the contract? 16 17 18 Α. After the execution of the contract, Panda personnel 19 began to solicit bids to construct the facility.

Initially, we had planned to construct a plant using a

gas turbine with an average output of between 75 and 95

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MW. However, after examining the available turbines and analyzing projected Panda Kathleen operations with respect to the temperatures, humidity and elevation common to Polk County and considering typical equipment degradation patterns and state environmental mandates, and the other factors discussed above on pages 10 and 11, it became clear that it would be impossible for Panda to ensure that it could produce the committed capacity of 74.9 MW for each day of the thirty year contractual term without a net generating capacity of at least 100 MW. Therefore, we decided to consider a turbine with power output of 100 MW to ensure that we could always meet the contractually agreed committed capacity and avoid defaulting on our contractual obligations to Florida Power.

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In this process, a change in the environmental regulations promulgated by the Florida Department of Environmental Protection ("FDEP") played a critical role. In 1992, by the time that this Commission had granted Florida Power's petition to refuse all standard

offer contracts other than Panda's, the FDEP had lowered its acceptable limit on a gas combustion 2 turbine's nitrogen oxide emissions from 25 parts per 3 million ("PPM") to 15 PPM. As a result, certain configurations Panda had previously considered would no 5 6 longer meet the standards set by the FDEP's regulations.

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Q. What discussions did Panda have with Florida Power after Florida Power and Panda executed their contract, to ensure that Panda would meet the contractual milestones?

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A. Beginning in January 1992, Panda representatives and

Florida Power representatives had numerous face-to-face

discussions and telephone conferences to implement the

contract and prepare for the in-service date.

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On January 9, 1992, I attended a meeting with Florida

Power to discuss our agreement and several areas that

needed clarification. Allen Honey, whom I believe was

Power Corporation's Senior Cogeneration Florida Engineer at that time, led the Florida Power team in attendance. At that meeting, Florida Power told us that while it would pay Panda for our energy output in the contract limited their excess οf 74.9 MW, obligation to pay for capacity in excess of 74.9 MW. This comported with our understanding of our agreement as well as with the engineering reality discussed above, namely that a facility capable of producing 74.9 MW of output at all times during a thirty year contract will, much of the time, be capable of generating more than 74.9 MW.

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In addition, at that January meeting, we discussed the fact that while the parties had agreed to a 30 year contract term and the contractual terms themselves reflected this, Schedule 3 to Appendix C to the contract only showed 20 years of payments. Florida Power acknowledged that this was an inadvertent error that needed to be corrected. Florida Power agreed that (1) Panda would receive capacity payments for the

1 entire 30-year term of the contract, and (2) Florida Power's payments would escalate over the contract term 2 not shown in the tables in Schedule 3 to Appendix C at 3 a rate of 5.1% per year. 4

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Schedule Florida Power stated that 3 was an illustrative table only and not a modification of the 30 year term. They explained that contract payments for years 21-30 of the contract had been omitted from Schedule 3 simply because the applicable regulations of only ten years or more required illustration of payments.

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Was this consistent with Florida Power's previous Q. evaluation of the value of Panda's proposal to the ratepayers and to Florida Power?

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When it had decided to contract with Panda in 19 Α. October 1991, Florida Power had used a calculus of 20 factors to rate the proposals. In the evaluation 21

containing that calculus, which it submitted to this

Commission in November 1991, Florida Power had rated

Panda's proposal as clearly the best offer for the

rate-payers and for avoiding expensive replacement

power. In its calculus, size, which Florida Power

defined as "the committed capacity," was weighted as

comprising 10% of the ranking. On the other hand,

feasibility was weighted at 40% and reliability at 30%.

Location and developer qualifications were weighted

equally with size. In its October 22, 1992 Order

granting Florida Power's petition for authority to

refuse all standard offer contracts except that

submitted by Panda, this Commission held that "the

criteria used to evaluate the various proposals were

valid, reasonable and fairly applied." Order at 5.

Q. Did Florida Power's behavior remain consistent with its

November 1991 evaluation of Panda's proposal?

A. No. In the later half of 1994, Florida Power rather suddenly began taking the approach that it was

unwilling to state in writing that Panda's equipment configuration was permissible under our contract. Up until the middle of 1994, Florida Power had consistently agreed with Panda representatives that a plant with a net generating capacity under certain conditions in excess of 74.9 MW was a technical necessity, and had suggested not raising the issue with the Florida Public Service Commission so as to not interrupt the challenge by ARK Energy to Florida Power's having chosen our contract. However, in the second half of 1994, Florida Power abruptly refused to sign any documents or clarification letters for lenders confirming our equipment choice.

J.

Until this time, Florida Power had treated Panda as offering the most feasible and reliable option for its customers and shareholders. After its sudden change, whereas facility size was previously not an issue, it suddenly emerged as the 100% criterion. In revising its evaluation process, Florida Power acted in a manner

1		inconsistent with its previous representations and its
2		November 1991 ranking process.
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4	Q.	Do you know of any reason for this remarkable change in
5		attitude by Florida Power?
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Q. What did Panda do to try to resolve this dispute?

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10 Α. Florida Power demonstrated its revised attitude 11 following Panda's June 3, 1994 application to the 12 Florida Department of Environmental Protection ("FDEP") 13 for an Air Permit for Construction of the facility with 14 a nominal output of 115 MW. In that application, 15 Panda had submitted two configurations: one based on 16 the General Electric ("GE") 7EA Combustion turbine and 17 the other based on the ABB Power Generation ABB 11N1.

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Representatives of Panda and Florida Power met on June 22, 1994 to discuss the excess energy which could be produced by either of those configurations. At that

1 meeting, Panda informed Florida Power of this submittal 2 and equipment configurations in Panda's Quarterly Progress Report dated June 20, 1994. See Panda's Quarterly Progress Report to Florida Power, dated June 20, 1994. (attached hereto as "Exhibit 6").

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Following discussions, the parties agreed that Panda would compose a clarification letter for both parties' signatures confirming the equipment configuration and the sale of excess energy produced by the facility to Florida Power.

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On June 23, 1994, Panda sent a clarification letter to Florida Power for its signature memorializing the parties' June 22, 1994 discussions. See June 23, 1994 letter from Ted Hollon to David Gammon (attached hereto as "Exhibit 7"). Yet, Florida Power refused to sign this letter. On July 27, 1994, Panda sent a revised clarification letter to Florida Power for its signature stating, among other things, that the two

1 configurations submitted to the FDEP 2 permitted in order to meet the committed capacity requirements of the contract as well as the current 4 environmental requirements in the State of Florida. See July 27, 1994 letter from Ted Hollon to David 5 Gammon (attached hereto as "Exhibit 8"). The revised letter further stated that although under certain site 7 operating conditions the facility's output would be 115 8 MW, Florida Power would not be obligated to make any 9 capacity payments above the 74.9 MW of committed 10 capacity. Finally, the letter stated that Panda had no 11 objection to Florida Power submitting this letter to 12 13 this Commission if Florida Power deemed it necessary.

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On August 3, 1994, Panda received a reply from Florida Power refusing to sign the revised letter. See August 3, 1994 letter from David Gammon to Ted Hollon (attached hereto as "Exhibit 9"). In its reply, Florida Power stated that it did not agree that the construction of a 115 MW facility was consistent with

the contract. However, Florida Power ignored the issue
of presenting any dispute to this Commission.

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In response, Panda initiated telephone conversations with Florida Power to resolve these new differences. These conversations seemed to have proved successful. As a result, on August 8, 1994, Panda submitted a third letter to Florida Power for its signature under the impression that this second revised clarification letter would be acceptable to Florida Power. August 8, 1994 letter from Ralph T. Killian to Robert Dolan (attached hereto as "Exhibit 10"). This letter reiterated that the facility size was 115 MW and added that Panda would submit the executed letter to the Commission to determine if Commission approval is Nothing in that letter prevented Florida required. Power from intervening or from taking any position in any such action at the Commission. Florida Power refused to sign this clarification letter as well. In a subsequent telephone conversation, Florida Power

2 Power signing the letter. 3 On August 10, 1994, Panda sent a letter to Mr. Dolan re-emphasizing Panda's understanding that the equipment it had selected was appropriate under the Contract. 7 See August 10, 1994 letter from Kyle Woodruff to Robert D. Dolan (attached hereto as "Exhibit 11"). 8 Panda also informed Mr. Dolan that it intended to 9 consult with the Commission to determine if this issue 10 11 required Commission approval.

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simply told Panda that it saw no advantage in Florida

Q. Did Panda discuss Florida Power's apparent concerns
about the equipment configuration with any
representative of the Florida Public Service
Commission?

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On August 15, 1994, Panda representatives met Α. with Joseph Jenkins, Director of the FPSC's Division of Electric and Gas, as well as Robert Trapp and Thomas Ballenger of the FPSC. In that meeting, Panda's representatives set forth the two specific equipment configurations it was considering, and the fact that, "under optimal conditions these units can produce in the 115 MW range." In response, Mr. Jenkins and his colleagues agreed with Panda that Panda's generation of net generating capacity of 115 MW was "consistent with Panda's standard offer contract and is not a contract change that would require Florida Public Service Commission approval." See August 24, 1994 letter from Barrett Johnson to Joseph Jenkins of the Florida Public

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Service Commission (attached hereto as "Exhibit 12").

Moreover, Mr. Jenkins stated that he had discussed this issue with Bob Dolan of Florida Power Corporation and Mr. Dolan concurred with Mr. Jenkins that this was a contractual matter between Panda and Florida Power that did not require PSC adjudication. See August 23, 1994 letter from Joseph Jenkins of the Florida Public Service Commission to Barrett Johnson (attached hereto as "Exhibit 13"). Based upon the express assurances of Mr. Jenkins, Panda moved forward with performing under the contract, continued with permitting the above equipment configurations, and felt it had satisfied the issue of facility size, despite Florida Power's lack of cooperation or initiative.

At no time during this process or at any other time prior to filing the instant action did Florida Power give any indication that it intended to reintroduce this matter before the Commission. Panda only received notice of Florida Power's true intent after Florida Power had filed its Petition for Declaratory Statement with this Commission on January 25, 1995.

2 3	VI.	CALCU	JLATION O	F PA	YMENTS	FOR	YEARS	21	THRO	UGH	30	OF '	THE
4		Q.	How are	capac:	ity pay	ments	to be	made	e to	Pand	a fo	r ye	ars
5			21 throug	rh 30	of the	cont	ract?						
6													
7		Α.	Payments	for	years	21 t	hrough	30	are	to	be 1	made	by
8			applying	the	value	defe	rral m	ethod		Payme	ent	thro	ugh
9			that meth	nod is	s consi	stent	with	the F	PSC':	s reg	ulat	ions	

### VII. BENEFIT OF THE CONTRACT TO FLORIDA CITIZENS

3 Q. How would Florida Power's rate payers benefit from a Panda facility that provided energy in excess of the committed capacity?

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7 For the energy that Panda produces in excess of the Α. committed capacity, Florida Power would be able to 9 purchase that energy from Panda at a low rate. Under 10 the contract, Florida Power is entitled to do so as it would pay Panda solely for the energy cost, without any 11 12 obligation to pay for the capacity based on the per-KW 13 cost of Florida Power's avoided simple-cycle combustion 14 turbine for 74.9 MW of capacity. As contemplated by 15 the contract, this would provide Florida Power with 16 free capacity. With the production of 115 MW of 17 energy, Florida Power would receive 40.1 MW of free capacity. This would enhance the reliability and 18 19 profitability of Florida Power's service.

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Moreover, as Robert Dolan, Florida Power's Manager of 22 Cogeneration Contracts and Administration, told the

1	members of a cogeneration association six months after
2	Florida Power executed its contract with Panda and six
3	months before this Commission approved the contract,
4	"The expected future need for capacity is great,
5	therefore it is virtually certain that this
6	[contracted] capacity will be needed. Florida's
7	population keeps expanding even during recessionary
8	periods, planned reserve margins are low, and there is
9	significant reliance on demand-side management. These
0	factors assure that there will be a market for this
1	capacity FPC has under contract." See Robert D. Dolan,
.2	"Financial Incentives For Power Purchases: A Utility's
.3	View," presented at the Gulf Coast Cogeneration
.4	Association, 1992 Spring Meeting Held April 21, 1992
5	(attached hereto as "Exhibit 14").

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## 18 VIII. WHAT IMPACT DID FLORIDA POWER'S ACTIONS HAVE ON PANDA

Q. What effect has Florida Power's refusal to honor its contract had on Panda?

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A. Florida Power's actions in attempting to dishonor its contractual obligation and seeking to rewrite the Panda-Florida Power contract to impose new obligations on Panda have had the absolutely predictable result of bringing Panda's financing of the Panda Kathleen facility to a halt. As no lender will offer financing to a party for a project of this magnitude when the other party is doing everything in its power to avoid its contractual obligations, Panda's commitment has been placed on hold pending resolution of these disputed issues.

By December 16, 1994, ABB Power Generation ("ABB") had begun engineering and material procurement to meet the required delivery dates. By January 11, 1995, Panda had obtained all construction permits and efforts were well under way to obtain financing and an equity partner for the project. Panda updated Florida Power on or about January 1, 1995, about this significant progress as required by the Contract.

Today, as there is no immediate financing available, Florida Power's actions have forced Panda to cancel its order for combustion and steam turbine generators with its supplier ABB and Panda has lost its place in the ABB production schedule. In addition, Panda has been forced out of the queue for the manufacture of other major components of its facility.

The forced delay in Panda's development of the project will be greater than the elapsed time lost from Florida Power's attempts to disown its contract. In other words, a day-for-day extension will not restore Panda to the position it occupied on the day prior to Florida Power's petition. Major pieces of generating equipment with long lead times are built by their manufacturer only when there is a firm equipment order in place and, if there is not a timely notice to proceed to the manufacturer, it normally means lengthy delays because the offering company will have to "go back to the end of the line" and the lead time varies greatly depending

upon the volume of orders received by the manufacturer at any given time.

Each of these activities is part of a critical time path to commercial operation and to meeting the milestones set forth in the Panda-Florida Power contract, as amended by the April 29, 1993 letter from Robert Dolan to Mark Bentley (attached hereto as "Exhibit 15"). Panda's ability to meet the

"Exhibit 15"). Panda's ability to meet the construction start date of January 1, 1996 and the inservice date of January 1, 1997 has been jeopardized solely as a result of Florida Power's actions in

attempting to disown the contract.

Further, any delay beyond the expected date for commercial operations costs Panda money in real terms even if the milestone dates are extended, because Panda will not receive capacity payments or revenues from the sale of energy when they were expected pursuant to the Contract.

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Moreover, Panda has already spent substantial sums to perform under the contract, including, but not limited to: purchasing land for the project site; contracting for environmental studies and permitting on the project site; surveying of the project site; paying Florida Power the \$750,000 security deposit, and paying fees to contractors, consultants, lenders, and attorneys. From 1991 to 1995, Panda expended these funds to ensure that it would meet a supplier's production schedule, comply with all Florida permitting requirements and meet the commercial in-service date.

In sum, Panda will be unable to discover the ultimate effect of Florida Power's actions at least until a final adjudication of this contractual dispute has been obtained.

Q. Does Panda remain ready, willing and able to build this
facility and commit 74.9 MW of capacity for 30 years as
called for in the contract?

5 A. Yes.

Q. What is it you want this commission to do?

A. Deny Florida Power's petition. Panda has asked this Commission to rule that it does not have jurisdiction to now go back and reinterpret a contract that it has approved on two separate occasions or, alternatively, to now rule that the Panda-Florida Power contract is void. Panda believes that issues of interpretation of this contract should be resolved by the courts. Of course, so long as this commission believes it has jurisdiction, Panda asks for a ruling denying Florida Power's petition and holding that (1) the equipment configuration Panda has chosen does not violate the contract, (2) Florida Power is obligated to pay for the committed capacity at the rate set forth in Appendix C

as escalated at the same rate for the final 10 years,
and (3) extending the contractual milestone schedule to

provide Panda with sufficient time to meet a revised

construction start date and a revised in-service date.

Anything less will destroy this cogeneration project

in violation of the principles of PURPA, to the

detriment of Florida's citizens.

8

9

Q. Does this conclude your testimony?

10

11 A. Yes, it does.

1	
2	
3	Raph Kill
4	
5	Valga Rill
6	
7	
8	
9	STATE OF TEXAS )
10	SS: 467-54-5763
11	COUNTY OF Day )
12	
13	The foregoing instrument was acknowledged before me this <u>6</u> 2
14	day of January, 1996 by Ralph Killian. He is personally known me
15	and did take an oath.
16	
17	[NOTARIAL SEAL] Notary: Therein M. Boxe  [Notarial Seal] Print Name: THERESIN M. BOXE
18	Notary: Mesesca / 1. Desc
19	[NOTARIAL SEAL] Print Name: /HERESIA
20	Notary Public, State of Texas
21	My commission expires: 6-23-97
22	TUTOTAL M. POUT
23 24	THERESIA M. BONE NOTARY PUBLIC State of Texas Comm Exp 06-23-97

FPSC DOCKET NO. 950110-EI EXHIBIT NO. \_\_\_\_RK-1



Florida Power

October 11, 1991

VIA FAX VIA CERTIFIED MAIL

Mr. Hans R. vanKuilenburg Panda Kathleen LP 4100 Spring Valley, Suite 1001 Dallas, Texas 75244

Dear Mr. vanKuilenburg:

To facilitate our selection of a standard offer contract among those submitted, please furnish the information requested in the attached questionnaire by October 25, 1991.

Sincerely,

T. I. Wetherington

Corporate Cogeneration Engineer

Methernston

TIW/kdh

TIW:#2:Letter.QF

Docket 95-0110-EI RALPH KILLIAN

Exhibit No. RK-1

Sheet 1 of 4

### FLORIDA POWER CORPORATION QF QUESTIONNAIRE

# TO ALL QUALIFYING FACILITIES SUBMITTING STANDARD OFFER CONTRACTS EFFECTIVE SEPTEMBER 20, 1991 ON OR PRIOR TO OCTOBER 4, 1991

(All Responses Will Be Treated Confidentially)

Responses Are Due October 25, 1991

	PANZA - KAthleen L.A.
	Bien Every & Bayenstin 1
_4	100 Spring Valley Road, Suite 1001 Sullas Texas
To	on Broby MANAGER - Business Development & SK
_7	Jephone: (314) 900 7159
	FAX: (219) 980-6815
Con	nmitted Capacity: 74.9 KW
Соп	ntract In-Service Date: April 1, 1995

Docket 95-0110-EI

RALPH KILLIAN

Exhibit No. RK-1

Sheet 2 of 4

4.	Specific Fac	ility Location a	nd Size: (full legal d	escription)				
	a.	County:	POIK County	, Florida				
	b,	Section:	١٥					
		Townships	285 (LAKela					
	c.	Township:		<u> </u>				
	d.	Range:	73 E					
5.	Status:	() Ex	isting	Planned				
6.	Type of Fac	ility: 🚫 Co	generator	( ) Small Power Producer				
7.	Fuel Source:	<b>:</b>						
	a.	Primary:	NATURAL G	DAS				
	ъ.	Secondary:	Distillate	Fuel Oil				
8.	If your proje information:	ct is planned ra	ather than existing, p	lease attach the following minimum				
, ,	/ a.	control, perm		I site, addressing such factors as site ch will be a factor in your ability to de documentation.				
•	<b>≥</b> - b.	and steam user user, including the steam user	er. Describe the less whether it is an exist that an ownership in	ion facility, describe the steam use el of commitment from the steam ing, ongoing enterprise and whether terest in the project. Provide copies on behalf of your project.				
R	eagle Hore C. R	Describe your fuel supply and delivery plan and the status of any commitments you have in this regard. Provide documentation.						
	¢∌, q.	Describe the sign procurement a	tatus of your project's	design, engineering and equipment that you have made for services or				
p	overbrat Brien D	1.		Docket 95-0110-El				
ľ	P	معلميه		RALPH KILLIAN				
	1 Brien	Balen	مسمعي	Exhibit No. RK-1				
Th	· Dr ' .	6 AT	<del>1</del> ~	Sheet 3 of 4				

Dir direct

Provide a project schedule showing major milestones from the contract approval date through the contract in-service date.

3/2 pm/.

Show how your facility will meet the qualifying facility criteria under the FERC.

for how.

Describe your financing plans and the ultimate financial structure of your proposed facility.

Reply to:

Thomas I. Wetherington Florida Power Corporation PO Box 14042 MAC B3L St. Petersburg, Fla. 33733

OI

Thomas I. Wetherington Florida Power Corporation 3201 34th St. S. MAC B3L St. Petersburg, Fla. 33711

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-1
Sheet 4 of 4

FPSC DOCKET NO. 950110-EI EXHIBIT NO. \_\_\_\_RK-2

### FLORIDA POWER CORPORATION QF QUESTIONNAIRE

### TO ALL QUALIFYING FACILITIES SUBMITTING STANDARD OFFER CONTRACTS EFFECTIVE SEPTEMBER 20, 1991 ON OR PRIOR TO OCTOBER 4, 1991

(All Responses Will Be Treated Confidentially)

Responses Are Due October 25, 1991

Panda-Kathleen			
4100 Spring Val	ley Rd., Suite	≥ 1001	Dallas, Texas
Tom Bagby, Mana	ger-Business I	Develop	ment & Sales
Telephone: (21	4)980-7159		
Fax: (214)980-	6815		
	<del></del>		
Committed Capacity:	74.0	ĸw	

Docket 95-0110-El
RALPH KILLIAN
Exhibit No. RK-2
Sheet 1 of 92

4.	Specific Facility Location and Size: (full legal description)									
	a.	County: P	olk County,	Florida						
	ъ.	Section:	20							
	c.	Township:	28S (Lakeland	1)						
	đ.	Range: ·_	23 E	<del></del> _	•					
5.	Status:	( ) Existi	ing	& Plann	ed					
6.	Type of Fac	cility: & Coge	nerator	() Small	Power Producer					
7.	Fuel Source	<b>::</b>								
	a.	Primary:	Natural Gas	5	:					
	b.	Secondary:	Distillate	Fuel Oil						
8.	If your proje information		ner than existing	, please attac	th the following minimum					
	a. Describe the status of your planned site, addressing such factor control, permitting status, etc. which will be a factor in your a ultimately develop the site. Provide documentation.									
	b. If your facility will be a cogeneration facility, describe the steam use and steam user. Describe the level of commitment from the steam user, including whether it is an existing, ongoing enterprise and whether the steam user has an ownership interest in the project. Provide copies of commitments by the steam user on behalf of your project.									
	c. Describe your fuel supply and delivery plan and the status of any commitments you have in this regard. Provide documentation.									
	d. Describe the status of your project's design, engineering and equipment procurement and any commitments that you have made for services of equipment in this regard. Provide documentation.									
		· · ·	Docket 95-011 RALPH KILLI Exhibit No. Sheet 2 of		p-K000604					

- e. Provide a project schedule showing major milestones from the contract approval date through the contract in-service date.
- f. Show how your facility will meet the qualifying facility criteria under the FERC.
- g. Describe your financing plans and the ultimate financial structure of your proposed facility.

Reply to:

Thomas I. Wetherington Florida Power Corporation PO Box 14042 MAC B3L St. Petersburg, Fla. 33733

OI

Thomas I. Wetherington Florida Power Corporation 3201 34th St. S. MAC B3L St. Petersburg, Fla. 33711

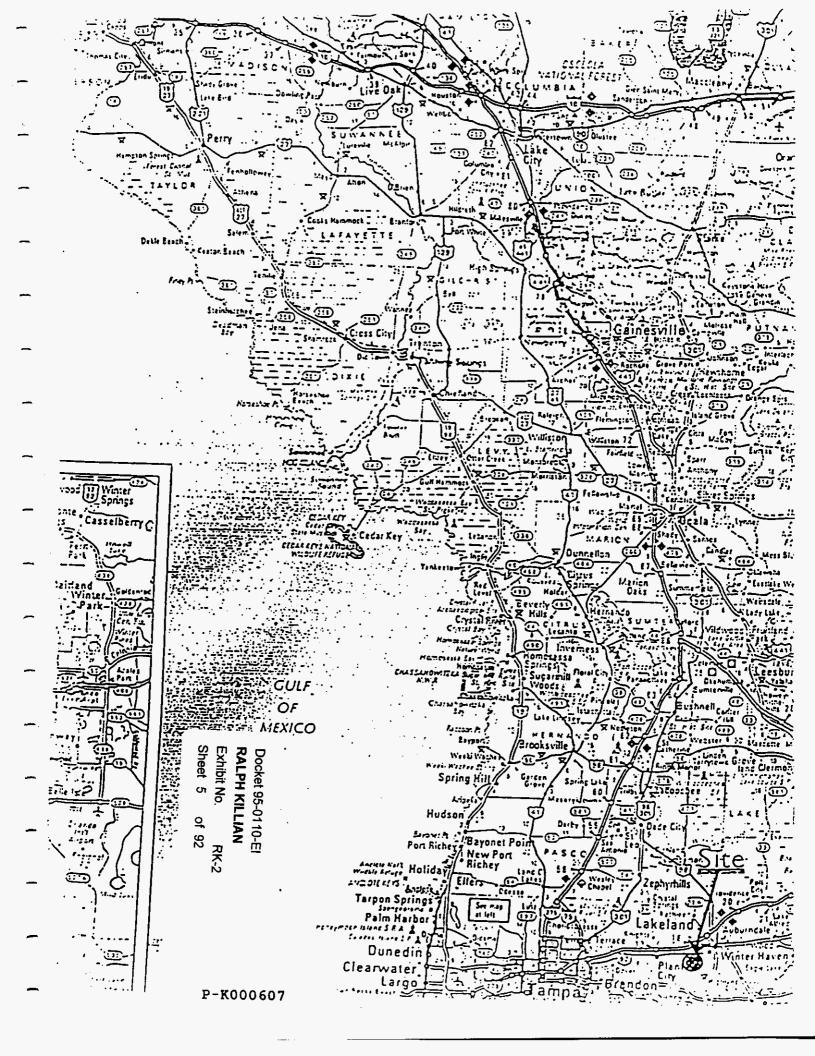
Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-2
Sheet 3 of 92

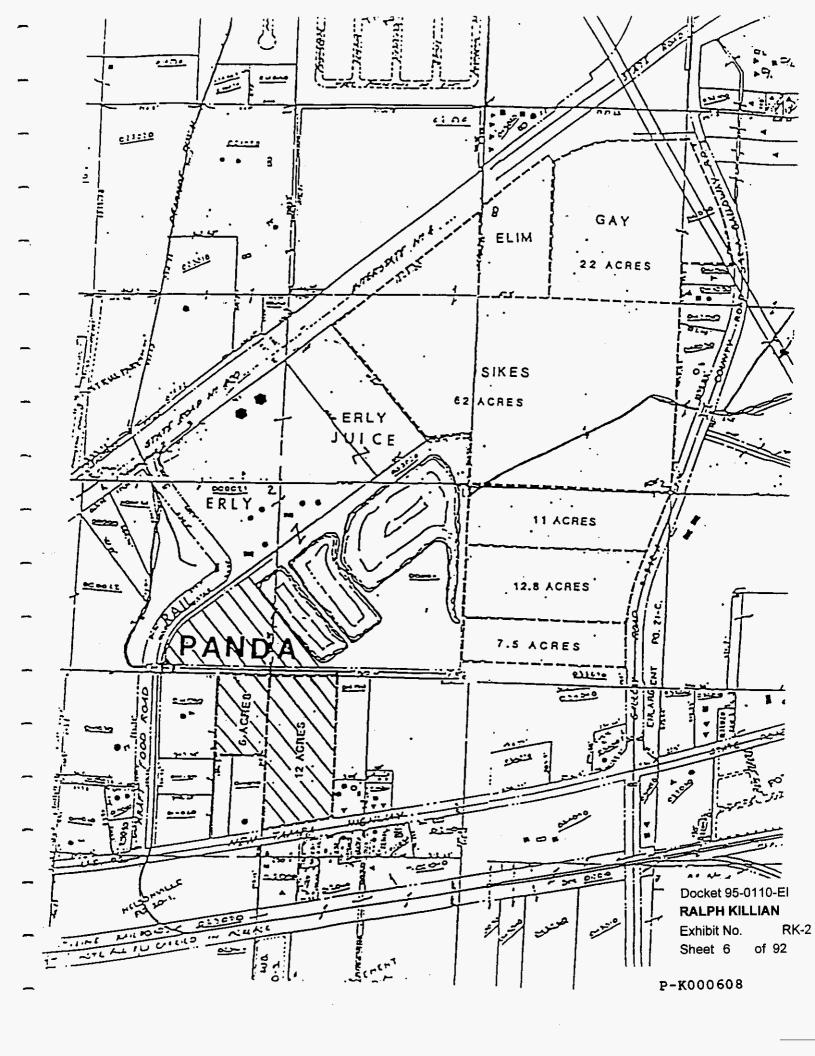
#### 8 a. Site Control

The Panda Kathleen facility will be located on a 17 acre tract of land in Western Polk County, west of the City of Lakeland, Florida. A portion of the site (12 acres) will be provided on a lease basis from Erly Juice Inc., which will serve as the steam host industry for the project and provide "QF" status. An additional 5 – 17 acres, immediately adjacent to the Erly Juice acreage is available for purchase. Through our real estate agent, Hauger-Bunch of Lakeland, Panda is negotiating acquisition of a portion or all of this acreage at this time: Copies of those offered agreements are attached. Also attached is a map that shows the site location and the additional land available. An approximate 1 mile looped interconnect can be made with FPC's 230 kV corridor using either highway or railway right of way. Site is also within 5 miles of the Florida Gas Transmission (FGT) Interstate pipeline to the north.

Contacts with permitting agencies have been made with regard to site and facility permittability. The site is zone GI (heaviest industrial usage in Polk County) and is surrounded by existing industry. With near surety of power sales contract, Panda will commence a fast track permitting schedule with a capable firm to achieve site, air and water permits to accommodate our proposed in service date.

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-2
Sheet 4 of 92





# Hauger-Bunch Inc.

January 4, 1991

Mr. Tom Bagby
panda Energy Corporation
4100 Spring Valley
Suite 1001
Dallas, TX 75244

RE: PROPERTY SEARCH LAKELAND, FLORIDA

Dear Tom:

SITE

Enclosed is a revised plat showing two proposed sites and correspondence from the various owners indicating the availability of their properties.

SITE 1 - 17 Acres on New Tampa Highway - consisting of: 12 Acres - Sunderland 5 Acres - Venture Properties

23.3 Acres on Galloway Road - consisting of: 12.8 Acres - English

11 Acres - Gay

An additional 7.5 acres south of the English property are also available for sale.

For your review, I have also enclosed a copy of our standard Contract For Sale And Purchase along with a proposed Addendum to provide the option provisions and contingencies that you require. We need to discuss this further.

I will be available next Thursday afternoon to meet with you to st you the above sites.

Sincerely,

HAUGER-BUNCH, INC., REALTORS

Al Piund

Realtor-Associate

Docket 95-0110-El

Exhibit No. RK-2

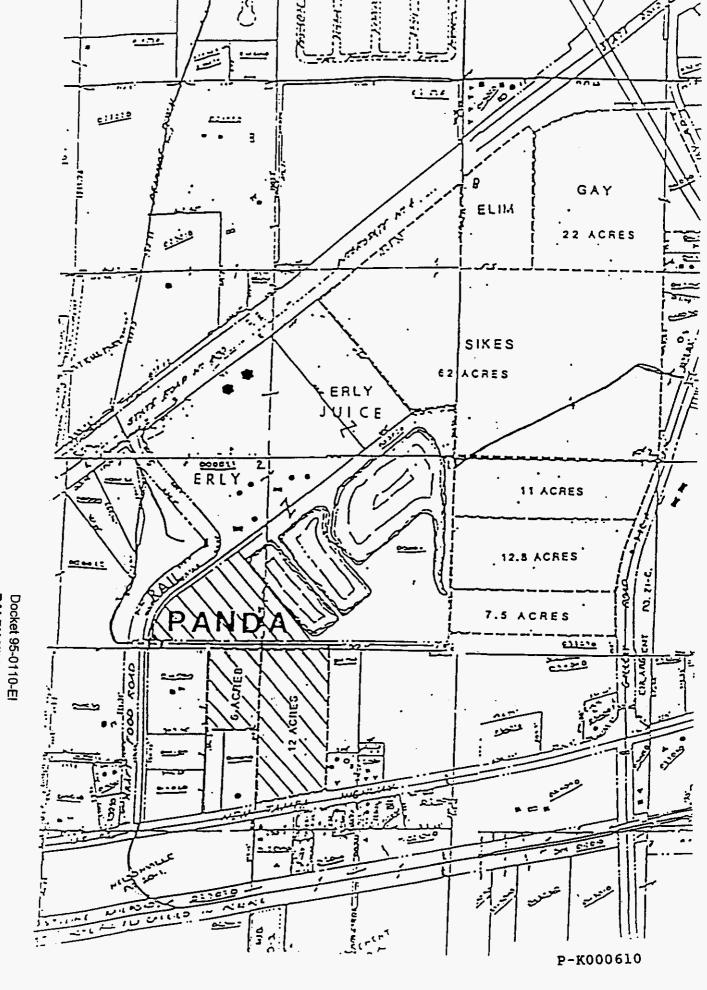
Sheet 7 of 92

AP:cc Enclosures

Commercial, Industrial & Investment Properties 1125 U.S. 98 South, Soite 100 P.O. Rox 3648 Likeland, Florida 53802-3648 1813 682-6147

indicate in the second second





Docket 95-0110-EI

RALPH KILLIAN

Exhibit No. RK-2

Sheet 8 of 92

# Concorde Brokerage Corp.

REAL ESTATE & MORTGAGES

Flec. 31, 1990

Mr. De Pfund Hanger-Burch, Low. Rentons 1125 215 48 50. Suit 100 Habelend; Fla. 33801

PE: 12 ACRESITE - 4965-75 NEW TAMPA HOWY, LAKELANE TEN AL:

The letter will acknowledge that we have contested by you in helply of your client, Panda Every Corp. in regard I The rule of it shows referenced jusquity.

He are fully aware that Paula Every pla build a gas-fired power plant on Ill Jerope if we reach agreement on a contract.

He have her admind by our attained my healter to sign no aption without finished consideration. The property is at for side and we will entertain an affect Panka Energy at any time. with continger of time, if necessary. (i.e. in regard to obtaining the hope of their fram your soun-int an affect from Panka Energy.

Thank you fee your time you spent with me is applied to plan.

Single , Friling he

Docket 95-0110-EI

RALPH KILLIAN

Exhibit No. RK-2 Sheet 9 of 92

619 E. ORANGE ST + LAKELAND, FLORIDA 33801 + (\$13) 688-2296

CCRALD W. CAPLEY GICHARD W. DELL Z J. UNDERWOOD, JR. GCHALD YACMASACH HONALD YACHASACH Big Pine Key.

January 3, 1991

Mr. Al Rfund Hauger-Bunch Inc., Realtors 1125 U S 98 South Suite 100 Lakeland, Florida 33801

REF: 5 ACRES (APPROX.) SITE (NORTH OF BUILDING) 5105 NEW TAMPA HIGHWAY, LAKELAND, FLORIDA

Dear Al:

This letter will acknowledge that we are in active negotiations with your client, the Panda Energy Corporation, for the sale of the above referenced property.

We are fully aware that Panda Energy will be building a gas fired power plant on this property. We have agreed that we will entertain contracts from Panda until March 1, 1991. During this period, should we receive any offers on the above referenced property from any third parties, we will notify you, as Panda's agent, of the offer and will give Panda five business days to match or exceed the offer in writing.

We are under no obligation to accept any offer from Panda or any third parties which is not completely satisfactory in our sole discretion.

The subject property is under considerations for sale to the Whitman Publishing Group, Inc. who is aware of and in agreement with the proposed sale to Panda Energy.

Sinceraly,

Docket 95-0110-EI

RALPH KILLIAN

Exhibit No.

RK-2

Sheet 10 of 92

John Whitman - Whitman Publishing Group, Inc.

Richard W. Dell/- Venture Properties

# Hauger-Bunch Inc.

January 2, 1990

Mr. Warren G. English P. O. Box 924 230 N. Galloway Road Lakeland, FL 33802

RE: 12.8 ACRE TRACT N. GALLOWAY ROAD

Dear Mr. English:

It was a pleasure meeting with you and Mrs. English earlier this week when you showed me the above mentioned property.

This letter will confirm that the property is available for sale a price of \$384,000 or \$30,000 per acre, and that you wish to re the option of removing the home from the site.

My prospect is the Panda Energy Corporation who is searching for site to construct and operate a gas fired power plant. You have agreed to entertain contracts from Panda until March 1, 1991. During this period, should you receive any offer on the property from any third party, you will notify me, as Panda's agent, of toffer and will give Panda five business days to match or exceed offer in writing.

You are, of course, under no obligation to accept any offer from Fanda or any third party which is not completely satisfactory in your sole judgment.

Please acknowledge your concurrence with the above in the space provided below, and I thank you for your interest in my prospect

Sincerely,

HAUGER-BUNCH, INC., REALTORS

· Read, Acknowledged and Agreed t

Al Pfund

Realtor-Associate

AP:cc

Exhibit No. Sheet 11

Day 3, 1991

Commercial, Industrial & Investment Properties 1125 U.S. 98 South, Soite 100 P.O. Box 3648 Ldcland, Florida 33802-36487813 782-6147

ide naiop



# Hauger-Bunch Inc.

January 11, 1990

Mrs. Eunice Phillips 2024 20th Ave. Parkway Indian Rocks Beach, FL 34635

RE: New Tampa Highway Property Parcel 012080, 20-28-23

Dear Mrs. Phillips:

This letter will confirm that the above mentioned property that is shown on the enclosed plat is available for sale and that you would entertain an offer to purchase from my client, the Panda Energy Company.

It would be helpful if you could provide me with a copy of the survey or at least the dimensions of the property. As I mentioned to Mr. Phillips, the county records show the acreage to be 1.72 while he believes it is closer to 3 acres.

Thank you for your interest in my prospect.

Sincerely,

HAUGER-BUNCH, INC., REALTORS

Al Pfund/

Realtor-Associate

AP:cc

Enclosure

Docket 95-0110-El RALPH KILLIAN

Exhibit No. RK-2 Sheet 12 of 92

Commercial, Industrial & Investment Properties 1125 U.S. 98 South, Suite 100/P.O. Box 3648 Likeland, Florida 33802-3648/813 682-6147





### 8 b. Steam Host

The Panda Kathleen facility will be a combined cycle, cogeneration facility with steam being sold to Erly Juice Inc. Panda will commit to supply up to 50,000 lbs/hr of steam to Erly for use in their orange juice processing and hull drying operation. Attached is a copy of the executed letter agreement between Panda and Erly Juice.

To bolster the strength of the project's steam host commitment, Panda has held discussions with National Energetics Company (NECO) who has a partnership with Archer Daniel Midland (ADM) for the production and supply of Carbon Dioxide ( $CO_2$ ). Based on the Florida market for  $CO_2$ , NECO is extremely interested in building a  $CO_2$  production plant at the facility that would commit to 40-50,000 lbs/hr steam use. This prospect provides a dual "QF" status potential and the basis for further expansion of this site into a larger facility.

Docket 95-0110-El

RALPH KILLIAN

Exhibit No. RK-2

Sheet 13 of 92



January 17, 1991

Erly Juice, Inc. 4100 Frontage Rd., South P.O. Box 32004 Lakeland, Florida 33802-2004

LETTER OF INTENT

#### Gentlemen:

This letter, when accepted by you, will acknowledge (i) that you are considering entry into an Agreement with Panda Energy Corporation ("Panda") relative to the construction of a Cogeneration facility to serve your Erly Juice/Lakeland Plant; (ii) that considerable time, effort and resources will be expended by you and by Panda in the course of this consideration; and (iii) that certain confidential information will be exchanged between you and Panda in the course of this consideration whether or not a Cogeneration Agreement is eventually entered between us. In consideration for this exchange of information and expenditure of time, effort, and resources, the parties hereto agree as follows:

- All data (electrical, steam, financial, price, contracts and other data and written information) exchanged between the parties will be used for evaluation purposes only.
- 2. All such data and information will be treated as confidential data by the Parties hereto. It will not be shown to or otherwise disclosed to any third party (other than to employees or consultants of the Parties) without express written consent to do so.
- All such data and information (and all copies thereof which may have been made) shall be immediately returned upon the other Party's request to do so.
- 4. Panda Energy Corporation (Panda) is preparing a proposal for Florida Power Corp. which requires that the location of the plant be identified to facilitate interconnection studies. Panda is granted exclusive authority to identify, in such request for proposal submittal within twelve months of the date of this Letter Agreement, your Lakeland, Florida Plant as the possible host for a cogeneration facility to be built by Panda.

4100 Spring Valley, Suite 1001 Dallas, Texas 75244 214/980-7159 FAX 214/980-6815

- 5. If Panda is successful in any such bid proposal, it is agreed that Erly Juice and Panda will enter into negotiations to attempt to consummate a cogeneration agreement which would parallel the contract term with Florida Power Corp.
- 6. Panda would agree to deliver steam to Erly Julce up to 50,000 pounds of steam per hour, at 150 PSIG, for \$2.00 per thousand pounds. (Escalation rate to be negotiated)
- 7. The facility will be located on 12 acres owned by Erly Juice at the Lakeland site. The property will be purchased or leased by Panda.
- 8. Each party hereto agrees that they will not contact third parties with whom the other party is in privy without permission to do so.
- 9. In consideration for the time and expense necessary to achieve project completion, this agreement can be extended for an additional twelve month period if progress, satisfactory to both parties, is being accomplished.

Nothing herein shall obligate either party to enter a Cogeneration Agreement. If the foregoing is acceptable to you, please execute, date and return a copy of this Letter Agreement to the undersigned to indicate your acceptance thereof.

Very truly,

PANDA ENERGY CORPORATION

Hans R. van Kullenburg

President:

Tom Bagby

Manager, Sales/Business Development

It is expressly agreed and acknowledge that Erly Juice, Inc. shall have : liability for any expenses incurred : Panda Energy Corporation arising out or relating in any way to this Agreemen Further, any agreements with respect Cogeneration, property sale or lease, related matters shall be subject further negotiation.

Accepted and Agreed to:

Erly Juice Inc.

Title: Vice President, Finance

Date: January 16, 1991

Docket 95-0110-EI
RALPH KILLIAN

Exhibit No. RK-2 Sheet 15 of 92

P-K000617



February 26, 1991

Mr. John Seelke
Manager, Cogeneration
Contracts & Administration
3201 34th St. South
St. Petersburg, Florida 33711

Dear Mr. Seelke:

This will acknowledge that ERLY Juice is in negotiations with Panda Energy for the purposes of consummating a cogeneration agreement. Pending the satisfactory resolve of the contract language, we believe that an agreement is possible.

If Panda is successful in their bid to Florida Power Corporation, it is agreed that ERLY Juice and Panda will negotiate in good faith to expedite the completion of the cogeneration agreement.

We at ERLY Juice view this project as an excellent opportunity to cut energy cost.

Very truly yours,

Bronson Schultz

Vice President, Finance

CBS:dc

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-2
Sheet 16 of 92



### FUEL PLAN PANDA LAKELAND PROJECT

Primary Fuel: Backup Fuel: Natural Gas No. 2 Fuel Oil

### Natural Gas Transportation

Panda will transport gas supplies from Louisiana and Texas on Florida Gas Transmission (FGT). Panda has requested firm transportation on FGT for 40 MMCFD. FGT accepted this request and included Panda's volumes in their Phase III expansion. Panda has executed a firm transportation service agreement and is in the process of returning same to FGT for their execution. A copy of this agreement is attached. FGT plans an in service date of July, 1994 for this expansion (see attached implementation schedule). FGT has designed a meter station at M.P. 44.0 on their St. Petersburg Lateral. Information on FGT's design is attached. From the FGT meter station to the proposed facility, Panda will construct a 4 mile pipeline.

#### Natural Gas Supply

Panda will purchase natural gas under long term contract from one or more suppliers. Proposals for this location from Sunrise Energy and Brymore Energy Ltd. are attached. Additionally, Panda has been negotiating with Citrus Marketing for a supply of gas for a project in Vero Beach, Florida. Citrus is also willing to supply gas to this facility.

#### Back Up Fuel

Panda will use No. 2 Fuel Oil as back up fuel. Panda will install 500,000 gallons of fuel oil storage. For a 75 MW facility, this will represent a 5 day supply.

10/29/91

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-2
Sheet 17 of 92

Request No: 0866

### SERVICE AGREEMENT FOR FIRM TRANSPORTATION SERVICE

	THIS	AGRE	EMENT	ent	ered	into	this		day o	f _	_		19_	_,
рγ	and be	tweer	Flor	ida	Gas	Trans	smissio	n Co	wbany,	a	Corp	orati	on	of
the	e State	of	Delaw	are	(he	rein	called	l "Tr	anspor	ter	:"),	and	Pan	da
Energy Corporation, (herein called "Shipper").														

#### WITNESSETH:

WHEREAS, Shipper wishes to purchase firm natural gas transportation service from Transporter and Transporter wishes to provide firm natural gas transportation service to Shipper; and

WHEREAS, Shipper has completed and submitted to Transporter a valid request for firm transportation service ("Request"); and

WHEREAS, in accordance with such Request, such service will be provided by Transporter for Shipper in accordance with the terms hereof.

NOW THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the sufficiency of which is hereby acknowledged, Transporter and Shipper do covenant and agree as follows:

### ARTICLE I Definitions

In addition to the definitions incorporated herein through Transporter's Rate Schedule FTS-2, the following terms when used herein shall have the meanings set forth below:

1.1 The term "Gas" shall mean pipeline quality natural gas which complies with the quality provisions set forth in the General

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-2
Sheet 18 of 92

-1-

Terms and Conditions of Transporter's effective FERC Gas Tariff, Volume No. 1, and includes gas well gas, casinghead gas and residue gas remaining after processing thereof.

- 1.2 The term "Rate Schedule FTS-2" shall mean Transporter's Rate Schedule FTS-2 as filed with the FERC as changed and adjusted from time to time by Transporter in accordance with Section 3.3 hereof or in compliance with any final FERC order affecting such rate schedule.
- 1.3 The term "FERC" shall mean the Federal Energy Regulatory Commission or any successor regulatory agency or body, including the Congress, which has authority to regulate the rates and services of Transporter.

### ARTICLE II Ouantity

- 2.1 The Maximum Daily Transportation Quantity ("MDTQ") shall be set forth in Exhibit B attached hereto. The applicable MDTQ shall be the largest daily quantity of gas Shipper may tender for transportation in the aggregate to all Points of Receipt, exclusive of Transporter's Fuel, and receive at all Point(s) of Delivery as specified on Exhibits A and B hereto on any day.
- 2.2 Shipper may tender natural gas for transportation to Transporter on any day, up to the MDTQ plus Transporter's Fuel. Transporter agrees to receive the aggregate of the quantities of natural gas that Shipper tenders for transportation at the Receipt Points, up to the maximum daily quantity specified for each such Point on Exhibit A hereto, and to transport and deliver to Shipper at each Delivery Point specified on Exhibit B, up to the maximum

-2-

daily quantity specified for each such point on Exhibit B, the amount tendered by Shipper less Transporter's Fuel, (as provided in Rate Schedule FTS-2), provided, however, that Transporter shall never be required to transport and deliver on any day more than the MDTQ.

### ARTICLE III Rate Schedule

- 3.1 Upon the commencement of service hereunder, Shipper shall pay Transporter, for all service rendered hereunder, the rates established under Transporter's Rate Schedule FTS-2 as filed with the FERC and as said Rate Schedule may hereafter be legally amended or superseded.
- 3.2 This Agreement in all respects shall be and remain subject to the provisions of said Rate Schedule and of the applicable provisions of the General Terms and Conditions of Transporter's effective Gas Tariff on file with the FERC (as the same may hereafter be legally amended or superseded), all of which are made a part hereof by this reference.
- 3.3. Transporter shall have the unilateral right to file with the appropriate regulatory authority and make changes authorized by such authority in (a) the rates and charges applicable to its Rate Schedule FTS-2, (b) Rate Schedule FTS-2 pursuant to which this service is rendered; provided, however, that the firm character of service shall not be subject to change hereunder, or (c) any provisions of the General Terms and Conditions applicable to Rate Schedule FTS-2. Transporter agrees that Shipper may protest or contest the aforementioned filings, or seek authorization from duly

constituted regulatory authorities for such adjustment of Transporter's existing FERC Gas Tariff as may be found necessary in order to assure that the provisions in (a), (b), or (c) above are just and reasonable.

### ARTICLE IV Term of Agreement

- 4.1 This Agreement shall become effective upon the "inservice date of the Phase III Facilities", which shall be deemed to be the first day of the month following the date on which Transporter gives notice to the Commission that the Phase III Facilities, as defined in Article X of this Agreement, are inservice, and shall continue in effect for a primary term (which shall not be less than a period of twenty years) of 25 years.
- 4.2 Termination for Non-Payment. In the event Shipper fails to pay for service provided pursuant to this Agreement, Transporter, in addition to any other rights it may have, shall also have the right to suspend or terminate service as permitted by the applicable provision of the General Terms and Conditions to Transporter's FERC Gas Tariff.

# ARTICLE V Point(s) of Receipt and Delivery and Maximum Daily Quantities

- 5.1 The Point(s) of Receipt and maximum daily quantity for each point(s) for all gas delivered by Shipper into Transporter's pipeline system under this Agreement shall be at the Point(s) of Receipt on the pipeline system of Transporter or any Transporting Pipeline as set forth in Exhibit A attached hereto.
- 5.2 The Point(s) of Delivery and maximum daily quantity for each point(s) for all gas delivered by Transporter to Shipper, or

-4-

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-2
Sheet 21 of 92

for the account of Shipper, under this Agreement shall be at the Point(s) of Delivery as set forth in Exhibit B.

#### ARTICLE VI Notices

All notices, payments and communications with respect to this Agreement shall be in writing and sent to the addresses stated below or at any other such address as may hereafter be designated in writing:

#### ADMINISTRATIVE MATTERS

Transporter:

Florida Gas Transmission Company

P. 0. Box 1188

Houston, Texas 77251-1188

Attention: Contract Management Department

Shipper:

Panda Energy Corporation

Attention:

#### PAYMENT BY WIRE TRANSFER

Transporter:

Florida Gas Transmission Company

NCNB National Bank Account No. 001658806 Charlotte, North Carolina

Docket 95-0110-EI

RALPH KILLIAN

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-:

### ARTICLE VII Facilities

Subsequent to commencement of service under this Agreement. Transporter shall not be obligated to, but may, at its sole discretion, construct or acquire new facilities, or expand existing facilities, in order to perform service under this Agreement. For purposes of this Agreement and Rate Schedule FTS-2, an expanded facility shall be deemed to be a new facility. Transporter's reasonable judgment it is necessary to construct or acquire new facilities, or to expand existing facilities, in order to enable Transporter to receive or deliver Shipper's MDTO at the Point(s) of Receipt and Delivery, and Transporter determines as provided herein to construct, acquire, or expand such facilities, then Transporter shall notify Shipper of the additional cost required, and such facilities shall, subject to the receipt and acceptance by Transporter of any necessary authorizations, permits and approvals, be constructed, acquired or expanded to permit the receipt and delivery of gas as provided for herein. Shipper agrees to reimburse Transporter, promptly upon receipt of Transporter's invoices, for all costs and expenses incurred under this Article VII by Transporter for any pipeline and related facilities including but not limited to the cost of any tap, electronic measurement equipment or data communications equipment for new meters, and appurtenant equipment and materials, and, overhead expenses. To the extent such reimbursement qualifies contribution in aid of construction under the Tax Reform Act of 1986, P.L. 99-514 (1986), Shipper also shall reimburse Transporter

for the income taxes incurred by Transporter as a direct result of such contribution in aid of construction by Shipper, as calculated pursuant to the Commission's order in <u>Transwestern Pipeline</u> Company, 45 FERC Paragraph 61,116 (1988). Transporter shall have title to and the exclusive right to operate and maintain all such facilities.

### ARTICLE VIII Regulatory Authorizations and Approvals

8.1 Transporter's obligation to provide service is conditioned upon receipt and acceptance of any necessary regulatory authorization that is acceptable in form and substance to Transporter to provide Firm Transportation Service to Shipper in accordance with the terms of Rate Schedule FTS-2, or any successor thereto which is substantially similar in form and content, and this Service Agreement. Shipper agrees to reimburse Transporter for all reporting and/or filing fees incurred by Transporter in providing service under this Service Agreement.

### ARTICLE IX Pressure

9.1 The quantities of gas delivered or caused to be delivered by Shipper to Transporter hereunder shall be delivered into Transporter's pipeline system at a pressure sufficient to enter Transporter's system, but in no event shall such gas be delivered at a pressure exceeding the maximum authorized operating pressure or such other pressure as Transporter permits at the Point(s) of Receipt.

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9.2 Transporter shall have no obligation to provide compression and/or alter its system operations to effectuate deliveries at the Point(s) of Delivery hereunder.

### ARTICLE X Other Provisions

- 10.1 No later than November 1, 1991, Shipper must demonstrate creditworthiness satisfactory to Transporter. In the event Shipper fails to establish creditworthiness by such date, Transporter has the option to terminate this Agreement at any time thereafter. For purposes of establishing and maintaining credit, Shipper shall provide Transporter with the information set forth in proposed section 23 of the General Terms and Conditions as filed in Transporter's rate proceeding in FERC Docket No. RP91-187, or any succeeding section that becomes effective on January 1, 1992.
- 10.2 Service pursuant to this Agreement is expressly subject to the following conditions:
  - The issuance, and acceptance by Transporter, of all necessary authorizations from the FERC pursuant to the Natural Gas Act or Natural Gas Policy Act permitting Transporter to construct, own and operate the Phase III facilities as described in Transporter's certificate application, as it may be amended or supplemented from time to time, and to effectuate the proposed service hereunder (hereinafter "Phase III Facilities")., All such authorizations shall be in form and substance satisfactory to Transporter, and shall be final before the respective governmental authority and no longer

Transporter may waive the condition that such authority be final and/or no longer subject to appeal or rehearing. Such authorization shall include approval of a capacity allocation methodology acceptable to Transporter in the event requests for service for the proposed Phase III Facilities exceed the availability of the expanded capacity which Transporter, in its sole discretion, is willing to build;

- (b) Receipt and acceptance by Transporter of all other approvals required to construct the Phase III Facilities including all necessary authorizations from federal, state, local, and/or municipal agencies or other governmental authorities. All such approvals shall be in form and substance satisfactory to Transporter, and shall be final before the respective governmental authority and no longer subject to appeal or rehearing; provided, however, that Transporter may waive the condition that such authority be final and/or no longer subject to appeal or rehearing.
- (c) The receipt of executed firm transportation service agreements from other shippers sufficient to economically justify construction of the Phase III Facilities, in Transporter's sole opinion.
- (d) The approval of rates by the Commission for transportation services provided on the Phase III Facilities that are acceptable to Transporter, in

Transporter's sole opinion. Shipper agrees to support a levelized rate methodology for the Phase III Facilities in any proceeding before the Commission during the term of this Agreement.

- (e) Receipt by Transporter of all necessary right-of-way easements or permits in form and substance acceptable to Transporter;
- (f) Transporter obtaining financing to construct the Phase III Facilities that is satisfactory to Transporter, in Transporter's sole opinion. Shipper agrees to provide reasonable cooperation in Transporter's effort to obtain financing;
- Transporter's and Shipper's obligations hereunder shall (g) be subject to the provisions of any final FERC order determining an allocation of capacity of Transporter's Phase III Facilities. However, in the event such allocation of capacity does not provide Shipper with the Annual MDTQs set forth in the Subscription Quantity Form, which is required to be completed and signed by Shipper and which is incorporated herein by reference, Shipper shall have the option to terminate this Agreement within fifteen (15) days of notice by Transporter of Shipper's allocation. If Shipper agrees to accept service for a lesser Annual amount, Transporter shall have the option to provide service at such lesser amount in the event all other conditions set forth in this Article satisfied. In the event such allocation of capacity does

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not provide Shipper with the Seasonal MDTQs set forth in the Subscription Quantity Form, Shipper may, but shall not be obligated to, contract for such lesser Seasonal amount. However, Shipper shall still be obligated for the allocated Annual MDTQ in accordance with the provisions of this paragraph (g).

- Shipper is obligated to reimburse Transporter for the (h) construction of taps, meters, receipt and delivery point upgrades, construction of supply and delivery laterals not included in the description of the Phase III Facilities and any other construction necessary to receive gas into, and deliver gas from, Transporter's Phase III Facilities. To the extent such reimbursement qualifies as a contribution in aid of construction under the Tax Reform Act of 1986, P.L. 99-514 (1986), Shipper also shall reimburse Transporter for the income taxes incurred by Transporter as a direct result of such contribution in aid of construction by Shipper, calculated pursuant to the Commission's order Transwestern Pipeline Company, 45 FERC Paragraph 61,116 (1988). Transporter shall have title to and the exclusive right to operate and maintain all such facilities.
- (j) In the event that all requisite approvals necessary to effectuate the proposed service hereunder are not granted in satisfactory form on or before December 31, 1993, then at such time either party shall have the right to

-11-

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terminate this Agreement upon sixty days written notice; provided, however, that if such approvals are obtained prior to the expiration of the sixty day notice period, such notice shall be of no further force or effect and this Agreement shall continue in accordance with the terms herein.

- Transporter agrees to make all reasonable efforts to (k) obtain the necessary authorizations, financing service commitments and all other approvals necessary effectuate service under this Agreement. Shipper agrees good faith in the performance of this to exercise Agreement by supporting Transporter's efforts to obtain all necessary authorizations, financing and approvals necessary to effectuate service under this Agreement.
- (1) At any time prior to Transporter's acceptance of all authorizations necessary to construct the Phase III Facilities, Transporter retains the right to terminate this Agreement, and to withdraw any requests or applications for regulatory approvals, and to terminate this project, at any time Transporter determines in its sole discretion that the project is no longer economical to pursue.

In the event the conditions set forth in this Article X are not satisfied, this Agreement shall be deemed null and void upon written notice by Transporter to Shipper.

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## ARTICLE XI Miscellaneous

- assigns of the respective parties hereto; provided, however, neither party shall assign this Agreement or any of its rights or obligations hereunder without first obtaining the written consent of the other party and any other regulatory authorizations deemed necessary by Transporter.
- 11.2 No waiver by either party of any one or more defaults by the other in the performance of any provisions of this Agreement shall operate or be construed as a waiver of any future defaults of a like or different character.
- 11.3 This Agreement contains Exhibits A and B which are incorporated fully herein.
- 11.4 This Agreement shall not be binding upon Transporter until executed by Transporter.
- 11.5 THIS AGREEMENT SHALL BE GOVERNED BY AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized officers effective as of the date first written above.

TRANSPORTER	SHIPPER
FLORIDA GAS TRANSMISSION COMPANY	Panda Energy Corporation
By:	By: Roll T. Kel Title: Vice President
ATTEST:	ATTEST:
Бу:	By:
Title:	Title:
Date:	Date:

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RALPH KILLIAN

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### FORM OF SERVICE AGREEMENT Firm Transportation Service (continued)

#### EXHIBIT A

TO

FIRM GAS TRANSPORTATION AGREEMENT

BETWEEN

FLORIDA GAS TRANSMISSION COMPANY

AND

Panda Energy Corporation

DATED

October 18 , 19 91

Point(s) of Receipt

Description of Point of Receipt

POI

November-April

May-October

Compressor Station 11

25309

41,715

37,080

- \* The MDQ set forth above is subject to any allocation of capacity approved by the Commission, and accepted by Transporter, that may be required in the event that requests for service for the Phase III Facilities exceeds the availability of expanded capacity available, which Transporter, in its sole discretion, is willing to build.
- \*\* Fuel reimbursement shall be 3% of the daily quantities received by Transporter at each receipt point. Such percentage is subject to final determination in the Phase III certificate proceeding.

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Date of this Exhibit A: Oct

October 38 1991

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#### FORM OF SERVICE AGREEMENT Firm Transportation Service (continued)

EXH	7	$\mathbf{D}$	TEN	- 12

TO

FIRM GAS TRANSPORTATION AGREEMENT

BETWEEN .

FLORIDA GAS TRANSMISSION COMPANY

- AND

Panda Energy Corporation

DATED

Ctober 18 , 19 91

Point(s) of Delivery

Maximum Daily Quantity (MMBtu)

Description of Point of Delivery POI

November-April

May-October

St. Petersburg Lateral M.P. 44

Maximum Daily Transportation Quantity\*: 40,500

36.000

The MDTQ set forth above is subject to any allocation of capacity approved by the Commission, and accepted by Transporter, that may be required in the event that requests for service for the Phase III Facilities exceeds the availability of expanded capacity available, which Transporter, in its sole discretion, is willing to build.

Date of this Exhibit B: October 18, 1991

Docket 95-0110-EI RALPH KILLIAN

Exhibit No.

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#### Florida Gas Transmission Phase III Expansion Subscription Quantity Form

Customer:	Panda	Energy	Corporation
Charliner.	101100		

FGT Request No: 866

Request Quantity

	Season	Oct	Nov-Mar	April	May-Sept
1) .	D\UTanex	40,500	40,500	40,500	36,000

Phase III Subscription

		Nov-April	Kay-Oct
2)	Annual Quantity (PMBTU/D)		
3)	Seasonal Quantity (MMBTU/D)		
4)	Total (MMTU/D)	40.500	36.000

Total of the greatest season on line 4 may not exceed the greatest requested quantity on line 1.

The quantity on line 4 above must be used to complete Exhibit B of the Service Agreement.

Panda Energy Corporation

By: Robert T. Kill

Title: Vice President

Date: October 18, 1991

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#### Florida Gas Transmission Phase III Expansion Supply Area Capacity Form

Customer: Panda Energy Corporation

FGT Request No: 866

Parties subscribing to Phase III capacity are requested to provide us with a description of their desired supply area capacity.

If you desire capacity in proportion to FGT's proposed design please initial here \_\_\_\_\_, otherwise please fill in the desired capacity by compressor station location.

Upstream of Compressor Station 6  Between Station 6 and 7  Between Station 7 and 8  Between Station 3 and 9  Mainline FGT	Desired <u>apacity (MMBTU/Dav)</u>
Between Station 7 and 8  Between Station 8 and 9  Mainline FGT	20,500
Between Station 8 and 9  Mainline FGT	·
Mainline FGT	20.000
	40,500
SNG Receipt Points	<del></del>
Between Station 9 and 10	
Between Station 10 and 11	
Mcbile Bay (1)	
Other Mainline FGT	
Total	40,500

(1) The composite desired capacity from Mobile Bay will be utilized to assess the feasibility of including a 100% owned FGT line to the Mobil Bay processing plants (estimated cost - \$50 MM) in the Phase III expansion.

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P-K000637

# FLORIDA GAS TRANSMISSION PHASE III EXPANSION

#### IMPLEMENTATION SCHEDULE

FGT has established the following schedule for implementing Phase III. The schedule is aggressive, but we believe, with your support, achievable. We will post any substantial changes to the schedule on FGT's bulletin board.

Distribution of Customer Information Package	September 16, 1991
Distribution of Service Agreements	September 25, 1991
Service Agreements Due	October 28, 1991
File Certificate Application	November 15, 1991
Final Certificate Issued	November, 1992
In Service	July, 1994



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## FLORIDA GAS TRANSMISSION PHASE III EXPANSION

#### CUSTOMER FACILITIES

Laterals between the mainline and the customer's facilities, meter stations, and appurtenances thereto are not included in FGT's Phase III cost of service. These facilities will be constructed pursuant to Section 10 of the FTS-2 rate schedule (this provision is identical to Section 11 of the FTS-1 rate schedule). This provision provides, in part, that the Shipper shall reimburse Transporter for the cost of any facilities which are constructed or expanded by Transporter to deliver Shipper's gas. There are two general mechanisms through which customers may reimburse FGT for the cost of the delivery facilities—by providing an up-front reimbursement or by entering into a lease agreement with FGT to amortize the facilities over the term of the service agreement. To the extent the up-front payment qualifies as a contribution in aid of construction, the customer must also reimburse FGT for income taxes. Generally speaking, reimbursement of delivery facilities always qualifies as aid in construction.

Attachment A-4 provides a description of the facilities necessary to deliver the gas from the mainline to the customer's facilities.

In many cases, multiple customers have requested capacity along the same laterals, and the cost of the facilities are proportioned. Where this occurs, a note is made by the cost estimate. Depending upon the actual subscription, this cost sharing may or may not materialize.

Our request log contains over 120 requests. Many of these were duplicative or had confusing delivery point information. If we erred in the design assumptions for the facilities necessary to deliver your Phase III requirements, please give us a call with the correct design requirements. We will provide one design (may include multiple delivery points) per customer.

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#### Panda Energy Corporation

#### FACILITY INFORMATION

#### **DELIVERY POINT NAME**

Panda Energy - Lakeland Point of Interest Number: None

REQUEST NO. 866

Summer Volume 29,100 MMBtu/d Winter Volume 31,600 MMBtu/d

#### MAXIMUM DAILY CONTRACT QUANTITY (MDQ)

Summer Existing 0
Summer Proposed 29,100 MMBtu/d
Winter Existing 0
Winter Proposed 31,600 MMBtu/d

#### NEW FACILITY REQUIREMENT (1)

Lateral taps and new meter station capable of delivering 1896 MMBtu/hr at 400 psig.

#### ESTIMATED COST OF NEW FACILITIES

Measurement Station	\$ 410,000
SUBTOTAL Tax Gross-up (31.8%)	\$ 410,000 130,380
TOTAL	\$ 540,380



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Please refer to discussion of sales laterals elsewhere in this package for reimbursement options. Pipeline and meter station requirements, where ownership splits are indicated, may change depending upon final volume commitments by other requestors. Please note that this cost estimate is based on the information available and is without the benefit of an on-site inspection and is therefore subject to change.

February 19, 1991

Panda Energy Corporation 4100 Spring Valley Road Dallas, Texas 75244

Attn: Ralph Killian

Re:

Cogeneration Facility Lakeland, Florida

Gentlemen:

Pursuant to our discussion pertaining to the proposed 150MW cogeneration facility to be built near Lakeland, Florida, this correspondence shall confirm the interest of Sunrise Energy Company to supply the natural gas as fuel for the facility. It our understanding that the facility's maximum gas usage shall approximate 28.2 MMCF/D and that its average annual rate shall approximate 25.4 MMCF/D. You have further advised us that the initial commencement date shall be around November 1, 1992 and that firm transportation has been requested on Florida Gas Transmission ("FGT") under its Phase III Expansion to be available sometime in 1994.

As we have discussed, FGT held an open season during August 1990, at which time Sunrise requested and received interruptable capacity in the amount of 65,000 MMCF/D on the FGT System. Included as a re-delivery point on the Sunrise agreement is POI 16280, Lakeland Generating. Although interruptable capacity has been limited to date, it is anticipated that with the completion of the FGT Phase II expansion to be completed next year, that interruptable capacity will be available except during the peak load periods on FGT's system.

During the months following the FGT open season, Sunrise has nominated at various times but has been unsuccessful in delivering any natural gas on its interruptable transportation agreement. We have sold gas on the FGT System only through the utilization of the firm transportation agreement of our customers. You might note that one of those customers is Florida Gas Utilities (of which the City of Lakeland is a participating municipality). Panda's procurement of a firm transport agreement under Phase III in 1994 will solve the capacity issue, thus giving rise to Sunrise's

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page Two February 19, 1991

ability to supply natural gas to the project on a firm basis. During the interim, Sunrise shall do all in its power to utilize its interruptable transportation as capacity is available.

You will recall that Sunrise is a publicly traded company, and its largest stockholder, The Exploration Company of Louisiana ("XCL"), has executed an exclusive agreement with Sunrise to market its natural gas. XCL is currently developing two fields in south Texas, easily accessible to FGT, which we believe could become the cornerstone of a gas supply for the project and which we can commit to a long term deal (15-25 years). Located in Jim Hogg County is the Cox Field and located in Karnes County is the Kennedy Field, which collectively have in excess of 250 BCF of proved developed producing, proved undeveloped probable and possible reserves net to the interest of XCL. 1991 production rates should approximate 45,000 MMCFD

Sunrise looks forward to discussing a mutually beneficial arrangement, wherein an executed agreement among the concerned parties can give Panda and Sunrise the assurances each needs to ensure a successful gas supply for the project.

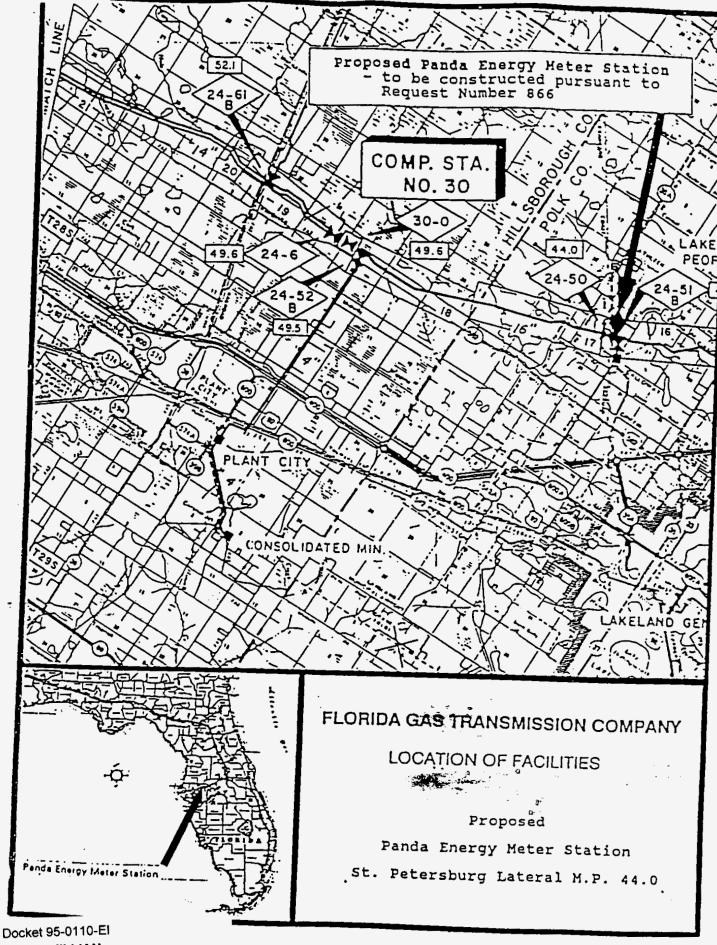
Should you have any questions, please contact me at your convenience.

Sincerely,

Philip D. Devlin Vice President

PDD/cm - a

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RALPH KILLIAN

RK-2 Exhibit No. Sheet 41 of 92



# The Principal/Eppler, Guerin & Turner, Inc. Investment Banker • Namber New York Stock Exchange

February 19, 1991

Mr. Ralph Killian
Vice President Natural Resources
Panda Energy Corporation
4100 Spring Valley Road
Suite 1001
Dallas, TX 75234

Dear Mr. Killian:

We are pleased to have the opportunity to assist Panda Energy Corporation ("Panda") to acquire and to arrange financing for natural gas reserves to fuel Panda's existing and proposed cogeneration projects.

We believe that the two coal seam methane projects we are currently discussing with you have the reserves and a production pattern that can economically provide all or a substantial portion of Panda's projected fuel needs for your proposed 150 MW cogeneration facility near Lakeland, Florida, which will sell power to Florida Power Corporation.

As we have discussed with you and your colleagues from the inception of the Panda Rosemary project, we are of the opinion that the most appropriate manner of financing gas reserves for Panda's projects is to include the required reserves as an integral part of the financing of each project. The inclusion of reserves committed to the project results in a reduction of the risks of gas availability and price for the owner/operator of the generating plant and at the same time it provides assurance of minimum volume and price parameters for the seller of the gas. We believe that such a financing structure will be attractive to financing sources and we are prepared to assist you to arrange the financing for one or more of the reserve acquisitions you are reviewing.

We look forward to working with you on this transaction.

Sincerely,

Alex Budzinsky Vice President

vice President

Director of Project Finance

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Exhibit No.

RK-2

The Foundain Place • PD Box 508 • Dallas, TX 75227-5535 • [214] 880-9000 Sheet 42 of 92

# Brymore Energy Ltd

Suite 1550, 353 - 11th Avenue S.W., Calgary, Alberta T2R 119

Fax: (403) 237-5222 Tel: (403) 269-5464

February 8, 1991

PANDA ENERGY CORPORATION 4100 Spring Valley Suite 1001 Dallas, Texas U.S.A. 75244

Attn: Mr. Ralph T. Killian

Dear Ralph:

#### RE: LAKELAND COGENERATION PROJECT

Further to our discussions on the subject project I would like to pass on some preliminary numbers for Canadian gas delivered into FGT. Schedule "A" attached details the various cost components. If these terms are of interest we would like to pursue this project further.

I would also like to take this opportunity to provide you with some background information on Brymore and our recent activities.

Brymore is a 100% Canadian, privately owned, independent firm headquartered in Calgary, Alberta. The company also has a wholly owned subsidiary, Brymore Energy Inc. which has an office in Las Vegas, Revada.

Erymore Energy Ltd. was created in October, 1986 to market western Canadian natural gas to industrial and commercial users and local distribution companies in Canada and the U.S. The Company's average gas delivery in 1987 was 35 HMcf/d increasing dramatically in 1988 to over 90 HMcf/d. For 1989 and 1990 Brymore's average gas deliveries were over 100 HMcf/d.

Currently, over 65 percent of Brymore's natural gas sales are for terms of one year or longer. Brymore has over 20 direct sales customers in Alberta and eastern Canada and is also engaged in natural gas market development in the United States. Two contracts have been completed for the purchase and sale of over 30 MMcf/d for twenty year terms in the U.S. Northeast, and we are at "Letters of Intent" stage for two other 15 year contracts. In addition, Brymore is marketing significant volumes on an interruptible basis in the Midwest and California.

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Brymore purchases natural gas on a regular basis from over 40 Canadian producers. Geographically, these purchases are mostly within Alberta.

In 1988, Finex Capital Corporation Ltd. acquired a significant equity interest in Brymore. Finex, a joint venture controlled by First City Trust, has extensive involvement in the energy sector in exploration and production, leasing, drilling and financing activities. Through its association with Finex, Brymore derives significant financial strength including the ability to finance large product transactions and transportation arrangements.

Enclosed is our most recent corporate brochure for your review. We appreciate the opportunity to talk with you about Panda's projects and hope we may be of assistance in the future.

Sincerely, BRYMORE ENERGY LTD.

R.N. Hobley, P. Eng. President

LL.1/Encls.

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#### SCHEDULE "A"

Alberta Gas to Lakeland, Florida Long Term Contract

#### Assumptions:

1. Term - 20 years

2. Volume - up to 30 MMCFD

3. Point of Delivery - into Florida Gas Transmission

4. Start Price - \$2.10 CDN/MMBTU (1991 price)

5. Price Escalator - 50% based on average price at Alberta border; 50% based on average price in market place.

6. Reserves - 10 to 15 year up front dedication, corporate warranty from producer on balance.

#### Pricino:

Price into Nova Nova (1991 tariffs) TCPL (1991 tariffs) Sub-Total	\$2.10 CDH./MMBTU 0.19 0.37 \$2.66
U.S./CON. conversion at 1.17	\$2.27 U.S./MM3TU
U.S. Transportation (est'd)	0.40
Price into FGT	\$2.67 U.S./MM8TU
tt.i	•

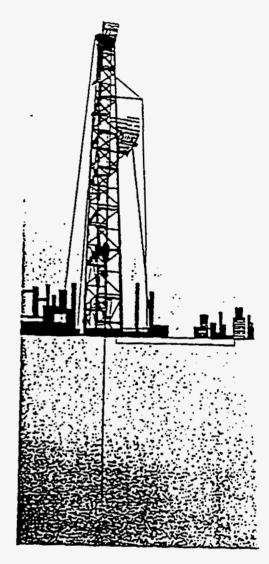
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BRYMORE ENERGY LTD, brings together proven natural gas marketing experience, financial strength and an intimate knowledge of the transportation and regulatory environment both in Canada and the United States.

# BRYMORE ENERGY LTD. and its U.S. subsidiary BRYMORE ENERGY INC.

1550, 333 - 11th Avenue 5.W. Calgary, Alberta T2R 1L9 Tel: (403) 269-6464 Fax: (403) 237-5222



Natural Gas Marketin & Transportation Service

# Brymore Energy Ltc

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RALPH KILLIAN
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#### The Company

#### BRYMORE

ENERGY LTD, is a privately owned Canadian company gathering, transporting and marketing natural gas within Canada and the United States.



Established in 1986, Brymore acquired

Finex Capital Corporation as a partner in 1983. Finex is a joint venture company associated with First City Trust Company



غرستي معروب شمارت

(assets of \$4.0 billion). With the support of Finex, Enjmore has the financial resources necessary to structure large product transactions and pipeline transportation service.

Brymare's markets

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| | move over 40 BOF of | | natural gar per year. | | Folkoor: | I bol

# N. W. W.

Don Severy - Care Marters

# BRYMCRE, through its thorough know ledge of the gas business from production to delivery, can provide comprehensive services in gas supply, transportation, marketing, regulatory and contract admini-

Diversified

Services



Comes solve to the more Bry more purchases its natural gas supplies from a diverse group of energy producers, matching particular market requirements with the most compatible pro-

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These convines are twenteen by a sequence group of professionals with over all personal combined or personal in the energy market-ing butters. Together, with any stempton staff, they are necessary to effectively local after our tomort gas supply needs and producers marketing requirements.



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#### Citrus Marketing, Inc.

P. O. Box 1188 Houston, Texas 77251-1188 [713] 853-6161 Fax (713) 853-1525

8/9/91

1.2

Mr. Ralph Killian Vice President, Natural Resources Panda Energy Corporation 4100 Spring Valley, Suite 1001 Dallas, Texas 75244

Ref: Vero Beach project - Revised proposal

Dear Mr. Killian,

As a follow-up to our recent negotiations, we have enclosed a revised proposal for the sale of gas on a twenty year, long-term, firm basis to Panda Energy for the above referenced project. In our submitting and your receiving this proposal, it is to be understood that Citrus Marketing is not making a binding offer or commitment and neither Citrus Marketing nor Panda Energy has any obligation in the absence of a mutually agreeable definitive agreement duly executed by both parties.

While the starting price is slightly higher than your target starting price, this escalating supply is for a period of twenty years. This extended term should significantly help in Panda's negotiations with Florida Power & Light. We have also addressed a variety of additional issues identified during our negotiation, including an alternative fuel supply, swing gas (Tier 2) priced at the same fixed price escalator as the Tier 1 gas and revised payment terms.

In addition to the attached gas sales proposals, we continue to be interested in discussing with Panda Energy the possibility of Citrus Marketing or its affiliated designee purchasing an equity interest in the project(s). Specifically, we would propose purchasing up to thirty percent (30%) interest upon mutually agreeable terms and conditions.

We look forward to hearing from you in response to this gas sales proposal.

Sincerely,

Geoffrey D. Roberts, Jr.

Account Director

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RALPH KILLIAN

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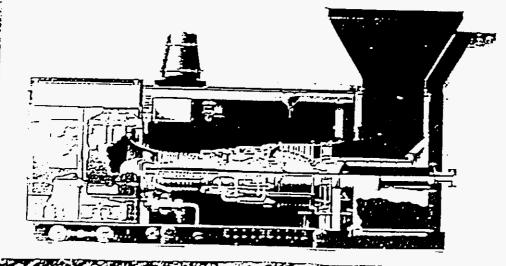
# LN2500 GAS TURBINE SYSTEM

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RALPH KILLIAN

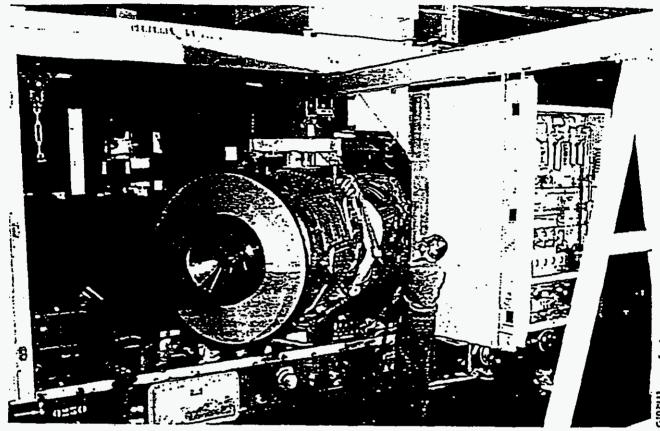
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GENERAL & ELECTRIC

P-K000651







The General Electric LM2500 Aircraft-Derivative Gas Turbine System

P-K000652

During the 1950's, the reliability, availability (operational readiness) and maintainability of aircraft-derivative gas turbines made them attractive to engineers seeking a lightweight, efficient and dependable power source for the industrial marketplace.

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M2500

The outstanding fuel efficiencies, extraordinary reliability/availability and low maintenance costs associated with aircraft engines are most desirable for industrial applications. The high power-to-weight ratio found in aircraft engines may have a critical impact on costs when it comes to platform applications. The General Electric TF39/CF6 engine, from which the LM2500 was derived, is among the most reliable aircraft engines ever built, and the rupture/creep life is essentially eliminated given the much reduced stresses of industrial applications.

The current General Electric LM2500 gas turbine system is the result of over 30 years' development of industrial gas turbine power systems and is based upon the extensive operating experience of more than 3600 heavy duty and 57 LM2500 gas turbine systems installed worldwide. The aircraft derivative gas turbine system is the ideal prime mover whenever efficiency and space/weight considerations are of vital significance. Capable of delivering over 30,000 horsepower, the LM2500 is packaged into a fully integrated system that includes engine controls, inlet exhaust systems, with silencing and provisions for in-package maintenance.

#### Designed for Maximum Application Flexibility

Off-shore platform application



Cogeneration application in western United States



The LM2500 gas turbine mechanical drive and power generation systems are designed to be flexible so that the system fits a variety of both platform and land-based applications: pipeline, gas gathering, a variety of industrial processes and power generation applications including cogeneration facilities.

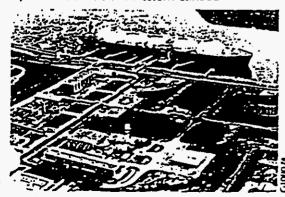
The design characteristics that make the LM2500 gas turbine system ideal for this variety of applications include:

- High simple cycle and combined cycle efficiency
- High availability
- Ability to withstand extreme temperature variations
- System capability for unattended operation
- State-of-the-art corrosion resistance
- Fast start capability
- Choice of inlet and exhaust arrangements
- Availability of fuel system options
- Ease of in-module maintenance
- SPEEDTRONIC\*\* Mark IV Control System
- Variable speed capability

TM — Trademark of General Electing Company USA.



Pipeline installation in western Canada



2500 gas turbine system In generator drive application at LNG regasification terminal In southwestern US

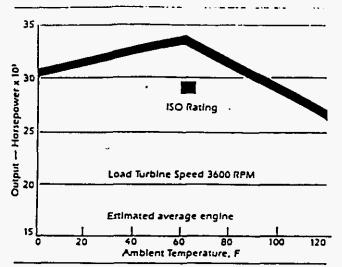
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#### Exceptional Reliability. High Specific -Power Capability. Outstanding Availability.

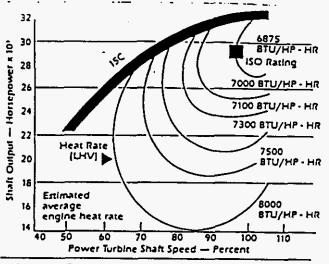


LM2500 Maximum Capability

The LM2500 gas turbine is now available in two output ranges (see chart below), each offering you extraordinary reliability and efficiency.

Further, the system components have demonstrated an exceptional level of operational availability. The remarkably high simple-cycle gas turbine efficiency, for instance, is the result of the high pressure ratio and firing temperatures made possible by the advanced design air cooling of the turbine blades and nozzles.

The LM2500PE differs from the LM2500PD in the high pressure turbine area. The high pressure turbine of the LM2500PE incorporates the advanced turbine technology of the CF6-50 aircraft engine and the LM5000 industrial unit. The turbine blade configuration is altered so that the blades are a



LM2500 ISO Rating Performance

single blade per shank design. The single blades are a cast cored design with improved cooling features.

Sidewall turbulators increase internal convective cooling, and shaped passages are utilized to reduce cooling air turning loss. The new blading design delivers lower and more uniform metal temperatures than previous high efficiency designs.

The turbine nozzle vanes, the turbine discs, the compressor, the airfoil and the stator vane schedule. all have been modified to increase output power. A test to evaluate the LM2500PE for ship propulsion demonstrated over 13,000 hours of operation on distillate fuel without hot section maintenance a 50% increase in hot section component life from previous estimated levels.

#### Performance Characteristics\*

#### LM2500 PE

#### Generator Drives

	SO Hz		50 Hz 60 H	
Fuei	Natural Gas	Distillate	Natural Gas	Distribute
Ontho:+W	20.400	20.400	21,100	21,100
Heat rate (U-W) ky/kWh Btu/kWh	10.640 10.085	10,710 10,150	10.330 9.790	10.400 9.560

are for 25,000 ms NG 6 E.OOC no onthing mirrares mest

'Guaranteed raung at generator terminan. 'Guaranteed real rate. Estimated average heat rate is 3% beller

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# Mechanical Drive

Turbine Spee	:d 300	va .	366	~
Fuel	Natural Gas	Distillate	Natural Gas	Disultate
Output hp kW	26.500 21.250	28.500 21.250	29.500 22.000	29,500 22,000
Heat rate (UHV)? ky/kW/n Btu/npn	10.325 7.300	10.390 7.345	10,030 7,090	10,095

Special are 100% juries capable of 105%) "Guaranteed rating at gat turbine bulbus couping. "Generator drives include standard investand ecolust pressure groop Mechanical divines are without most and emailst pressure droos

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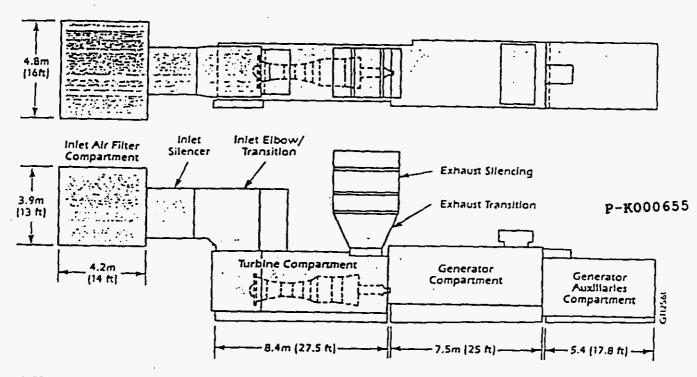
# Compact. Lightweight. Modular Construction.

# Major Components Installed Weights and Dimensions (Estimated)

<u></u>	kgs. (lbs.)	meters (feet)
LM2500 Package, less Gas Turpine	21,319 [47,000]	8.4×2.8×3.5 (27.5×9.2×11.5)
LM2500 Gas Turbine LM2500 Gas Turbine in Shipping Container	3.266 [7,200] · 6.518 [14,370]	4.8x2.2x2.3 (15.8x2.3x7.7)
Inlet System (Up & Over) Compartment including filtration	9,979 [22,000]	4.2x4.6x3.9 (14x16x13)
Silencer Elbow/Transition	4,536 (10,000) 2,722 (6,000)	2.5x2.7x2.5 (8.5x9x8.5) 3x2.7x2.4 (10x9x9)
Exhaust System	2.721 (0,000)	
Silencer Transition duct between plenum ülencer	5.851 (12,900) 2,903 (6,400)	2.2x3.2x3.1 (7.5x10.5x10.3) 2.4x3.3x1.8 (8x11x6)

Modular design gives quick installation capability. The nature of aircraft derivative design establishes the compact, lightweight characteristics of the LM2500 system. And the lightweight components also contribute to the high power density required where space is at a premium, such as on platforms.

Low component weights and small component sizes make these modular assemblies, as well as the containerized engines, easy to handle and transport. The modular design also allows for ease of maintenance with a reduced need to stockpile parts.



M2500 Gas Turbine System Arrangement

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LM2500

#### The GE LM2500 Gas Turbine System

#### The Base and Enclosure

The LM2500 package includes, in addition to the turbine, an inlet plenum, and exhaust plenum and an accessory compartment mounted on a structural steel base with a weatherproof enclosure designed for sound attenuation (90 dBA near field). The entire package is approximately 8.5 m [27.5 ft] long, 3.5 m [11.5 ft] high, 3 m [9.2 ft] wide and weighs less than 27.273 kilos (60,000 lbs).

#### The Fuel Systems

The LM2500 system can operate on a variety of fuels: natural gas, distillate fuels or a combination of both. The standard gas fuel system can accomodate a  $\pm$  10% variance in design heating value. Low Btu fuel operation has been demonstrated, and this capability is available as an option. Water or steam injection for suppression of NO $_{\rm X}$  emissions is also available as an option.

#### The Starting Systems

There are several starting systems available: a compressed air-driven, air- or gas-expansion turbine mounted on the gas turbine accessory gear box; and a hydraulic starting system.

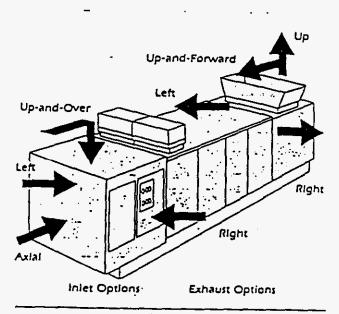
The normal starting system air pressure is 7.8 bars [115 psi] absolute pressure at 15°C [59°F] air pressure. The maximum flow rate is 1.4 kg/s [3 pps] with a consumption of 126 NM³ [4800 scf] per start, including a two-minute purge cycle.

Compartment Cooling and Pressurization A forced ventilation system circulates clean, filtered (approximately 900 changes/hour) air through the enclosure. Adequate cooling of the turbine is thereby assured while keeping the temperature of the enclosure well within design limits. The forced air results in a slight positive pressure which minimizes the entrance of airborne contaminants, making the LM2500 particularly well-suited for use in corrosive or dust-laden environments.

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Inlet and Exhaust Arrangements

#### The Inlet and Exhaust Systems

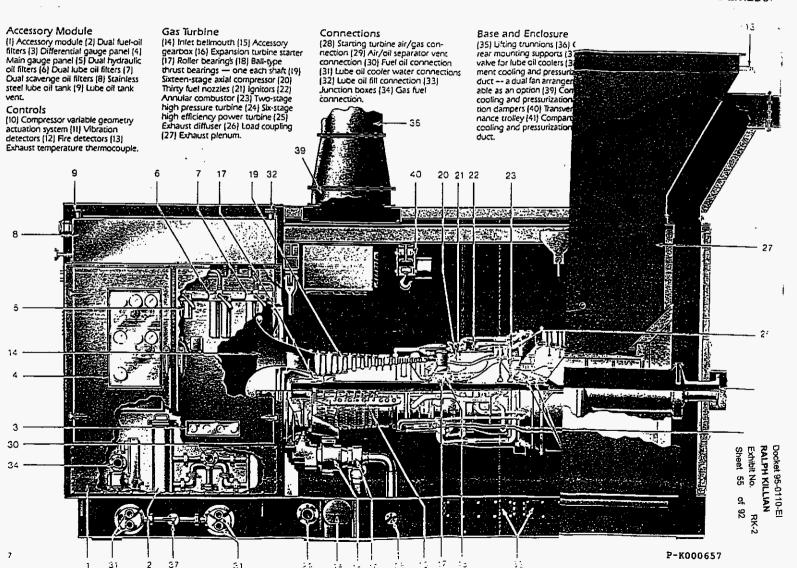
Four inlet arrangements are available: up, axial, right side and left side. The inlet filter compartment can be provided with inertial separators, high-efficiency filters, moisture separators, prefilters and snow hoods. All the inlet compartments have access and implosion doors.

The exhaust plenum can be directed upward or to either side.

#### The Accessory Module

The accessory module, which may be attached to either side of the inlet plenum, includes a 208 liter (55 gal) stainless steel lube oil tank, a gauge cabinet, dual scavenge, hydraulic and fuel oil filters and — when required — a gas fuel regulating valve.

#### The LM2500



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#### The Accurate, Reliable SPEEDTRONIC™ Mark IV Control System

The SPEEDTRONIC Mark IV Control System is an electronic control designed for gas turbine control performance and reliability.

The system consists of redundant computer sections with a video display and membrane switch operator interface. The system can be enhanced for remote control and condition monitoring by the addition of the General Electric DATATRONIC\*\* Information and Control System.

The SPEEDTRONIC Mark IV Control utilizes three control sections which are isolated from each other. A fourth control regulates the data exchange between the control sections. In this way, there is no common tie between the controls that could cause a failure to all the sections at one time.

Redundant sensors are included in the system. to increase control availability for turbines in applications where sensor failures are more likely and replacement may not be possible while the turbine is operating.

On-line diagnostics locate and identify faults. which can then be isolated and repaired while the good sections continue to operate the turbine.

Failure rates have been reduced by decreasing the number of electronic components directly controlling the turbine. Most failures can be serviced on-line without the system being upset, shut down or tripped.

The 16 bit microprocessors used in the Mark IV Control have greatly reduced the large, complex, costly and less reliable systems required in the past for three-channel redundance.

Although the Mark IV panel is relatively simple. it provides far more detailed and useful information than previous controls. For example, there is a video display of alarms which provides identification of the problem, indicates the time of occurrence, the location, whether it is an alarm or trip and whether the alarm is new or has been acknowledged. More than 150 displays can be called up from the system's memory, and a drawer-mounted printer can produce a hard copy of any of these displays.

A CRT located in the center of the control panel provides a broad overview of the operating condition. A series of membrane switches on a central pad enables the operator to select detailed displays to investigate any condition of interest.

Critical operator selections are acknowledged by LED's behind the switches. To prevent accidental commands and reduce operator error, a command sequence is used in which the operator must make the selection and press the execute pad before the selection can be executed.

A built-in logic sequence readily adapts to the varying needs of both the turbine and its associated auxiliaries. Programming is normally performed at the factory and is incorporated into the memory. However, on-site modifications are easily performed through the use of a simple terminal.

On-site calibration of process parameters is easy with the CRT display and the front panel membrane switches. In power generation applications, the SPEEDTRONIC Mark IV Control has a built-in synchronization program based on General Electric's experience with the microsynchronizer

used in the previous Mark II Control.

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iara of Ceretal Electric Company Light

#### C. FACILITY DESCRIPTION

The Facility will be a natural gas fueled cogeneration facility utilizing combustion turbine-generators, heat recovery steam generator(s), and steam turbine-generator arranged in a combined cycle configuration with process steam being exported for off-site use. The Facility will also utilize appropriate auxiliary equipment and systems as described in this section.

#### MECHANICAL FACILITIES

#### 1. Combustion Turbine-Generators

The facility will have three combustion turbine-generators. Each gas turbine-generator will be suitable for outdoor application, capable of multi-fuel operation and will have multi-stage inlet air filters, inlet silencing, lube oil cooling system, fire suppression system, generator with excitation equipment and switchgear, acoustical enclosure, controls and appropriate provisions for NO<sub>x</sub> control.

#### 2. Heat Recovery Steam Generators

The facility will have one multipressure level heat recovery steam generator (HRSG) for each combustion turbine-generator. Each HRSG will utilize hot combustion turbine exhaust gas to generate steam at two or more pressure levels. The HRSGs will be designed and constructed in accordance with the

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requirements of the ASME Boiler and Pressure Vessel Code, Section I Power Boilers.

Each HRSG will have the appropriate superheater, evaporator, and economizer, sections for steam generation at each pressure level and will also have piping and valves, insulated transition ductwork from the combustion turbine to the HRSG, and main exhaust stack.

#### 3. Steam Turbine Generator

The facility will have a extraction/condensing steam turbine-generator sized to utilize steam generated by the HRSGs. High pressure steam will be supplied by a high pressure steam header. The steam turbine will have intermediate pressure steam extraction and induction capability to provide flexibility in operations and enhance facility performance.

#### 4. Steam Surface Condenser

The facility will have a surface condenser utilizing circulating cooling water in a closed loop cooling tower system. The surface condenser accepts exhaust steam from the steam turbine generator, condenses it and collects it in a hotwell.

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#### 5. Feedwater System

Feedwater pumps will take suction from the deaerators and provide feedwater to all sections of the HRSG's. Multiple pumps will be utilized to provide flexibility/reliability.

#### 6. Condensate System

The condensate supply for the deaerators will be provided by condensate pumped from the hotwell of the surface condenser and/or condensate pumped from a storage tank, and by condensate returned from process steam. Makeup to the condensate system will be provided from a demineralized water storage tank.

The return process condensate is of acceptable quality, and it will be accepted back into the cogeneration plant.

#### 7. High Pressure (HP) Steam System

High pressure steam generated by each HRSG will serve primarily as inlet steam for the steam turbine-generator, but may be reduced in pressure and attemperated to supplement an intermediate or low pressure steam supply. During startup or a steam turbine trip, the HP steam is desuperheated and routed to the surface condenser, and/or vented to the atmosphere.

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8. Intermediate Pressure (IP) and/or Low Pressure (LP) Steam System

IP and/or LP steam generated by each HRSG will serve to maximize heat

recovery from gas turbine exhaust, and supply the gas turbine and/or steam

turbine with injection steam. During startup or upon steam turbine trip, the

IP steam is desuperheated and routed to the surface condenser and/or vented.

IP and/or LP steam generated by each HRSG is also used in the deaeration

of the boiler feedwater.

9. Fuel System

The primary cogeneration plant fuel will be natural gas with No. 2 fuel oil

used as backup. No. 2 fuel oil system will be stored in a tank on site with a

capacity to provide an adequate number of days storage for re-order, delivery

and a continuance of oil operation.

10. Plant Air System

A plant compressed air system utilizing oil free air compressors will supply

the cogeneration plant's plant compressed air and instrument air systems.

The instrument air system takeoff will be downstream of desiccant air driers

and filters.

11. Blowdown System

A continuous blowdown flash tank and atmospheric blowdown tank will be

supplied adjacent to each HRSG. The flash steam from the continuous

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blowdown flash tank will feed to the deaerator. The unflashed liquid dumps to the atmospheric blowdown tank. The drains from this tank will be adequately quenched and routed to a waste collection sump.

## 12. Firewater System

Firewater water will be supplied from a raw water storage tank by a diesel fire pump with electric jockey pump. Monitors will be strategically located for fire fighting as required per local ordinances.

Hydrants will be strategically located inside the cogeneration plant as required per local ordinances.

## 13. Water Treatment System

The thermal host will return condensate from the steam supplied. Makeup for the demineralized water system will be from the City water system or other source. Makeup water will be stored in a raw water storage stank before being forwarded to the demineralized water system. The demineralized water system will provide water of suitable quality for makeup to the HRSG's. The demineralized water system includes acid and caustic regeneration systems, necessary piping and valves, and instrumentation for automatic control. Demineralized water will be stored in a demineralized water storage tank.

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The demineralized water treatment system capacity is based upon the steam to process, water or steam requirments for NO<sub>x</sub> control, and boiler blowdown, and with expected return of acceptable quality condensate from the thermal host. The demineralizer system shall be sized to provide for the continuous operation of the Facility.

## 14. Cooling Tower Water

City water system or water from other sources will be used for cooling tower makeup.

## 15. Potable Water System

City water supply system.

## 16. Plant Service Water System

City water supply system or water from other sources.

## 17. Wastewater System

A neutralization tank will be provided for treatment of demineralizer regenerant to produce a non-hazardous waste. When neutralized, the waste will be transferred to a waste collection sump.

Plant waste water from various equipment drains will be collected in an oily waste sump and pumped by transfer pumps to an oil/water separator. Oil

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collected from the separator will be trucked away to a final disposal site and treated water will go to the waste collection sump.

Boiler blowdown, cooling tower blowdown and other non-oil contaminated drains will be routed to the waste collection sump. Total plant effluent will be monitored to comply with discharge permit requirements.

Sanitary waste will be discharged to the city/county sewer system or to permitted surface source.

## 18. Chemical Feed System

Caustic for demineralizer regeneration and acid for demineralizer regeneration will be stored in a horizontal above ground tanks designed for filling by chemical pumper truck.

Chemical feed skids with mixing tanks and feed pumps will be provided for each HRSG and the feedwater system and for the closed loop cooling water system including inhibitor for circulating water.

## 19. Safety Shower and Eyewash Stations

Safety showers and eyewash stations will be provided in chemical handling areas.

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## 20. <u>Circulating Water System</u>

All plant cooling water requirements including the gas turbine-generators, heat exchangers and lube oil systems will be served by a circulating water system. This system will consist of a mechanical draft, multicell cooling tower, circulating water pumps and auxiliary cooling water pumps with all required piping and instrumentation.

## **ELECTRICAL POWER SYSTEM**

Power will be generated at 13.8 kv by the combustion turbine generator sets and steam turbine generator set. Each of the generators will be provided with a 13.8 kv generator breaker for isolation of the generators when start-up power is fed back into the plant from the utility grid and for synchronizing for normal plant operation. The combustion and steam turbine generators will be connected to step-up transformers. The step-up transformers will transform the generated voltage to from 13.8 kv to 230 kv. Each transformer will have a 230 kv circuit switcher on the primary and connected to a 230 kv ring bus through overhead conductor. The 230 kv ring bus will be connected by a radial transmission line through two (2) 230 kv breakers with isolation disconnect switches to the utility substation line. Revenue metering equipment will be supplied to meter imported start-up power and exported power at the 230 kv in connection point.

The Station service transformers will transform 13.8 kv power to 4.16 kv for the medium voltage auxiliary motors of the plant. Transformers will also supply 480 volt

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power to the auxiliary loads of the turbine generators and to the Balance of Plant loads. A plant and substation ground grid will be supplied in accordance with applicable code and FPC requirements.

Line ups of 4.16 kv switchgear, 480 volt switchgear, and 480 volt motor control centers will be supplied to distribute power to plant auxiliary loads. Suitable 480 volt power panels and lighting power distribution panelboards will be supplied to complete the auxiliary power distribution system.

A 125 VDC battery and charger system will be supplied to provide control power for the 13.8 kv and 480 volt switchgear and the plant Uninterruptible Power Supply System (UPS). The UPS will convert 125 VDC power to 120 volt, 60 Hz, single phase power for the vital A.C. loads of the plant.

## INSTRUMENTATION AND CONTROLS

The primary control of the cogeneration plant will be a distributed control system (DCS). The DCS will coordinate startup, shutdown, and operation of the combustion turbines, heat recovery steam generators, steam turbine and balance of plant so that each is properly and safely controlled. Each of the sub-systems will be monitored and controlled to ensure overall plant safety and efficiency. The instrumentation and control systems will be designed to aid the operator in achieving reliable steam and electric power generation.

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MAINTAINABILITY

Plant Maintainability will be provided for by outdoor design with adequate access

to all components. The gas turbines will be provided with removable outdoor

enclosures with personnel access doors for inspection and minor maintenance.

The steam turbine generator will be installed within a building with a bridge crane.

Outdoor pipe racks will allow easy access to valves and instruments. The water

treatment system will be enclosed and includes the caustic storage tank within the

building.

An enclosed warehouse space will be provided for storage of tools and spare parts

and will have a suitable workshop. Boiler chemical feed units, compressed air dryers

and similar equipment will be enclosed to facilitate inspection and maintenance.

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## 8.d. <u>EQUIPMENT COMMITMENTS AND DESIGN</u>

The following is a list of a major equipment items and the anticipated vendors of those items. We have also attached letters from various vendors regarding their commitment to Panda for schedule delivery.

## Major Equipment List

- Stewart and Stevenson/General Electric LM 2500 Three (3) Generator Power Plant
- Heat Recovery Steam Generator Three (3)
  Nooter Erikson or
  Deltak
- Steam Turbine Generator One (1)
  Siemens Power Corporation or
  Asea Brown Boveri

The above listed equipment are critical path delivery plant items. Scope of the GE LM 2500-33 Gas Turbine - Generator Plant is prepackaged and available to meet Panda's proposed on steam date of April 1, 1995.

All balance of plant items for combined cycle have been determined to have delivery schedules of six (6) to ten (10) months and will not adversely impact our scheduled construction and start up. A milestone schedule showing order, delivery and construction period is shown in answer to question 8.e.

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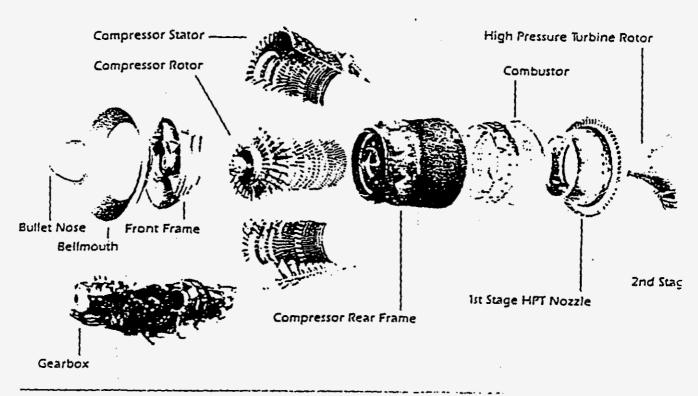
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# Design and Components of the LM2500 Modular Design



Expanded View of LM2500 Components

P-K000670

### Modular Design

The compact, lightweight components of the LM2500 gas turbine system are modular in design and are both easy to handle and to maintain. This modular concept offers you greater maintenance flexibility and a substantial reduction in capital outlay for replacement parts.

## Compressor Section

Compressor: The compressor is a 16-stage, axialflow design with a high 18:1-pressure ratio. The inlet guide vanes and the first six stages of stator vanes are variable. Their angular position is changed as a function of compressor inlet temperature and compressor speed to provide smooth, efficient operation over the entire operating range. Cooling and Sealing Air: These bleed manifolds are integrated into the compressor stator casing to extract 8th, 9th, and 13th stage air. These, along with the compressor discharge bleed, supply air at proper pressures and temperatures for cooling, sealing, and pressure balancing functions.

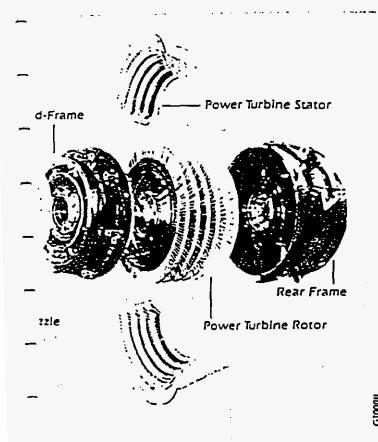
#### · Hot Gas Path

Combustor: The LM2500 annular combustor design features uniform temperature distribution and profile, individual replaceable noncoking fuel nozzles, and state-of-the-art coatings to improve hot corrosion resistance and extend combustor life.

High-Pressure Turbine: A two-stage high-pressure turbine drives the compressor. Both stages of nozzles and turbine blades are air-cooled and coated to improve erosion, corrosion, and oxidation resistance. These blades are of a single dovetail design that gives improved cooling characteristics and longer life or higher specific output.



## The GE Six-Stage Power Turbine



Designed to match the flow, temperature, and pressure range of the LM2500 gas generator, the General Electric six-stage power turbine makes the LM2500 unit the most efficient, simple-cycle gas turbine in the world. The six-stage power turbine is designed for frequent thermal cycling and uses fully shrouded blades in all stages to maintain high efficiency throughout the life of the unit. Its component efficiencies exceed 92%, giving an overall power turbine efficiency in excess of 88%. This high efficiency provides fuel savings, increased power and lower gas generator firing temperatures (with increased hot-section life) for the same shaft power as that found in other types of power turbines.

The GE six-stage power turbine has compiled millions of hours of operation, demonstrating without a question that it is capable of continuous operation over the complete range of power and RPM. Delivering a nominal speed of 3600 RPM, it is ideal for 50/60 HZ industrial generation, compressor or pump drive service.

An effective combination of convection, impingement and film cooling gives the desired blading and nozzle temperatures required to produce high simple-cycle efficiency and achieve long maintenance intervals.

Accessory Gearbox: A gearbox is provided to drive the accessories critical to running reliability and to simplify black start capabilities. Power is extracted through a radial drive shaft at the forward end of the compressor. Drive pads are provided for the lube and scavenge pumps, the hydraulic pump, the variable stator control/pump, the liquid fuel pump, the starter, and the air/oil centrifugal separator.

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## Built-In Maintenance Flexibility

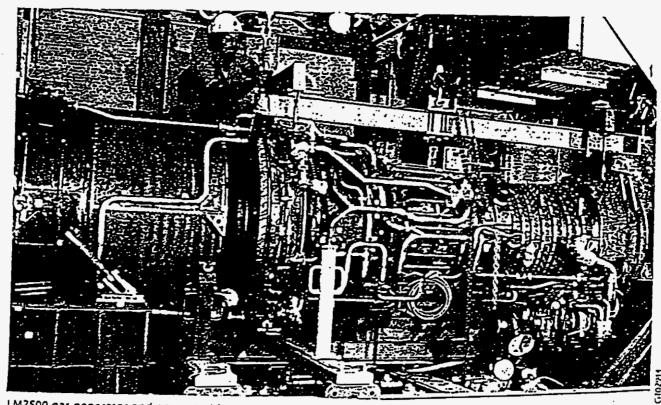
"Keep it on line" is the philosophy behind the maintenance flexibility built into every LM2500 gas turbine system.

The LM2500 gas turbine uses the "on-condition" maintenance concept in which there are no predetermined schedules for overhauls, hot-section repair or corrective maintenance. System features include:

- Modular design
- Compact, lightweight components
- Provisions for borescope inspections
   The enclosure was designed to utilize fully the maintenance advantages of the gas turbine:
- Overhead rail system for easy gas tubine installation and removal
- Optional lower rail system for in-module maintenance

- Accessory module for filters, gauges
- Dual filtration oil systems for uninterrupted operation:
  - Lubrication
  - Hydraulic control
  - Scavenge
- Wide access doors
- Acoustic and thermal protection
- External hook-ups:
  - Fuel
  - Water
- Options:
  - Dual lube oil coolers

    Dual enclosure ventilation fans



LM2500 gas generator and power turbine separated in the turbine compartment

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# Customer Support and Training

In support of LM2500 gas turbine system installation, General Electric offers each customer technical assistance, installation services, and preoperation evaluation.

On-site operation and maintenance training programs can be provided. Classroom training is also available in Evendale, Ohio and Schenectady, New York or at user-specified locations.

Service agreements are available with several levels of maintenance or service provided depending on customer requirements.

# Repair Facilities, Spare Parts and Publications

General Electric provides customized recommendations for spare parts and stocks of replacement parts for individualized operations and maintenance support.

An inventory of spare parts should be on hand for planned gas turbine maintenance. In addition to the supply of support parts maintained by General Electric to serve as backup for operation inventories, a spare parts list for each level of maintenance is available.

Tooling is provided for installation and removal. A recommended tooling list is available for each level of maintenance.

General Electric offers field repair, including labor, tools, and parts, when on-site maintenance or repair is chosen. In-shop repair is done on the basis of either "inspect and repair as needed" or complete overhauls.

Operation and maintenance manuals covering equipment, systems description, installation and removal, operation, on-site maintenance, scheduled inspections, troubleshooting, compressor cleaning, tools, and spare parts are provided.



Operator training develops effective operation and maintenance techniques.

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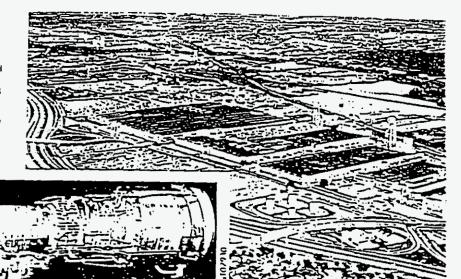
Sheet 72 of 92

LM250

Gas Turbine Production Facilit

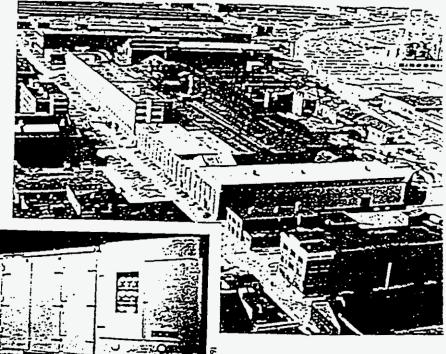
#### Evendale, Ohio

Military, industrial and commercial gas turbines, including the LMZSOO, are manufactured at this facility. In addition to the manufacturing operations, Evendale has a full complement of applied research, development, test and quality control senices.



## Schenectady, New York

The Gas Turbine Division has been producing reliable gas turbines in Schenettady since 1946. This facility is the nome of the engineering and manufactuning operations which have designed and integrated the system package with the UMZ500 gas turbine.



P-K000674

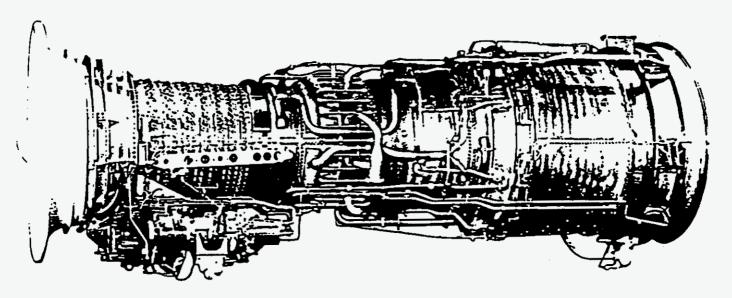
Turbine Marketing & Projects Operation
One River Foad
Schenectady, New York 12345 USA



## **TURBINE GENERATORS**



**MODEL NO. TG2500-33** 



#### **SPECIFICATIONS**

#### **GAS TURBINE**

Compression Ratio ...... 18:1

Turbine Type ...... 2 Stage HP + 6 Stage FPT

Combustion Type ......... Annular Combustion Inlet Air Flow ... 147.5 lbs/sec

#### STANDARD GENERATOR

 Type
 Air Cooled

 KW
 23,400

 Power Factor
 0.85

 Voltage
 13,800 V AC

 Phase
 3

 Frequency
 60 Hz

 RPM
 3600 RPM

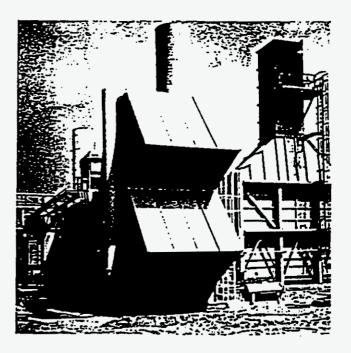
 Exciter
 Brushless, PMG

#### **GENERATOR SET RATINGS**

Ratings are average new and clean performance at sea level and 59° F (15° C) conditions. No inlet or exhaust losses in using natural gas.

# Docket 95-0110-EI RALPH KILLIAN

Exhibit No. RK-2 Sheet 73 of 92



## TURBINE GENERATORS



#### MODEL NO. TG2500-33

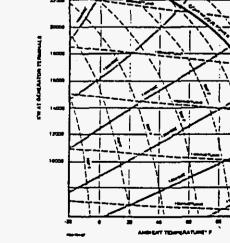
### STANDARD EQUIPMENT

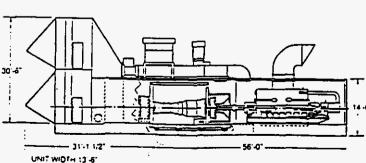
- LM2500-33 gas turbine engine equipped with inlet screen & bellmouth seal.
- Gas fuel system complete and self-contained on the unit with connection on the baseplate for customer's fuel supply at 400-600 PSIG.
- Alternator, 13,800 V AC, 60 Hz, 3600 RPM, 27,500 KVA @ .85 pf; low maintenance brushless excitation system suitable for Class 1, Group D, Div. 2 areas; neutral and line cubicles with CT's, surge protectors and lightning arrestors.
- Continuous I-Beam baseplate for basic turbine generator and air inlet filter system.
- Acoustic enclosure for both gas turbine and generator with AC internal lighting and redundant ventilation systems.
- Intake air system including weather hoods, 3 stage inertial filtration system, intake silencer, ducting and screens.
- Electro Hydraulic start system.
- Separate oil systems for gas turbine generator each with duplex filters, roof-mounted redundant air/oil coolers and interconnecting piping.
- Exhaust collector with discharge flange arranged RH horizontally.
- Fire and gas detection and Halon extinguishing system serving both turbine and generator compartments.
- Unit control panel for remote mounting includes
   Woodward fuel management system, programmable
   microprocessor for sequencing, generator metering,
   Bently 7200 vibration monitoring, CRT annunciation of
   alarms and shutdowns, and printer for data logging. A
   24 V DC battery and charger assembly is included.
- Set of ladders and walkways for access to filter house.
- Unit-mounted water wash system.
- Generator factory testing to IEEE 115 standards; gas turbine engine performance test at G.E. Aircraft Division factory (Evendale, Ohio); full load string test of complete turbine generator package at Stewart & Stevenson factory (Houston).

- 6 sets drawing and data package, operation/maintenance manuals.
- Training course for up to 10 customer personnel.

#### OPTIONAL EQUIPMENT

- 50 Hz alternator and associated unit AC devices
- Water cooled generator
- · Alternate exhaust orientation
- Alternate side piping or electrical connection
- · Liquid fuel system
- · Dual fuel system
- Water injection metering system
- Steam injection metering system
- Immersion heater for generator lube system
- Engine marine coatings
- Evaporative cooling
- Pneumatic start system in lieu of electro hydraulic
- · Black start system
- Unit motor control center
- Switchgear to specifications
- Modular control room to house unit control panel, unit motor controls, switchgear, low voltage transformer and customer process panel.
- · Synchronous condensor operation.





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RALPH KILLIAN

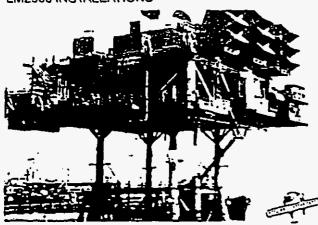
Exhibit No.

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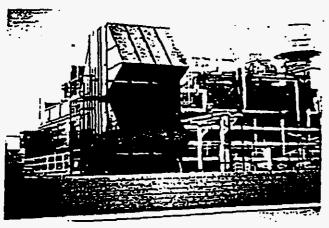
# STEWART & STEVENSON LM2500 INSTALLATIONS



OIL & NATURAL GAS COMMISSION

Bombay, India

Stewart & Stevenson received its first order for an LM2500 Gas Turbine Generator Power Plant from ONGC in 1980. In all, Stewart & Stevenson provided three prime power generator sets for a production platform located offshore India. Each LM2500 package was rated at 15 MW at 40° C ambient temperature and full load string tested at our Houston, Texas facility prior to shipment.



SUNLAW ENERGY
Vernon, California

Two LM2500 co-generation plants each providing 1,000 tons of refrigeration at 40° F to two cold storage ware-houses. These two plants provide the utility with a total of 56 MW. Stewart & Stevenson is under contract to provide the operations and maintenance of the complete cogeneration plant at both of these facilities.

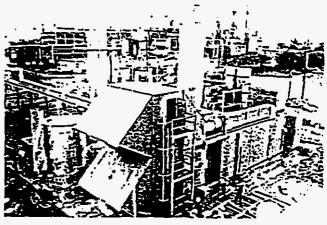
Docket 95-0110-El

RALPH KILLIAN

Exhibit No.

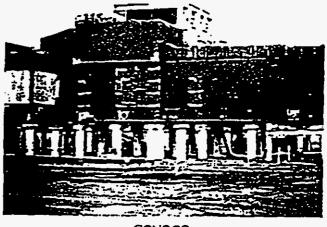
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## HAWAIIAN INDEPENDENT REFINERY Honolulu, Hawaii

This LM2500 Power Plant supplied by Stewart & Stevenson was on line producing power and thermal energy for the refinery in less than fourteen months after order date. Remarkably, this unit was commissioned 30 days after arrival on site. The fuel system on this unit was unique in that the unit is able to operate on one of four different fuels (by-products of the refinery).



CONOCO Milne Point, Alaska

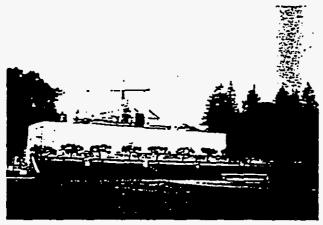
These two LM2500 generator sets are being used for prime power service at a remote oil field located on the North Slope of Alaska. The turbine generator and controls were full load string tested prior to shipment. The complete package was designed for start-up and operation in a minus 60° F climate. The special generator set enclosures are divided up into three compartments — gas turbine room, generator room, and turbine monitor and control room center. These larger-than-usual enclosures, which will accommodate all maintenance required inside, were designed to maintain a 40° F minimum temperature.



## INSTALLATIONS



## STEWART & STEVENSON LM2500 INSTALLATIONS



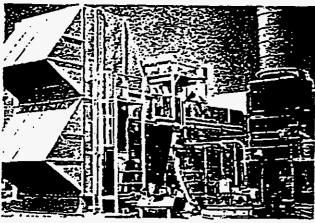
## UNIVERSITY OF CALIFORNIA Berkeley, California

Stewart & Stevenson was contracted to meet a very stringent noise requirement with the LM2500 Gas Turbine Generator Set. The free field noise level coming from the unit could not be greater than 85 dBA at three feet. The power plant provides 200,000 #/hr of steam for all heating and cooling required for the campus. Twenty-four MW of electricity is sold to the local utility, Pacific Gas and Electric. Stewart & Stevenson is also under contract for the operation and maintenance of the entire plant.



## **UNITED AIRLINES**

San Francisco, California
Stewart & Stevenson provided an LN12500 Gas Turbine
Generator Set which is used in a combined cycle/cogeneration mode. Low quality steam was extracted from
the steam turbine and utilized in one of the largest aircraft
maintenance facilities in the world. As part of Stewart &
Stevenson's scope of supply, a prefabricated and pre-wired
control building was engineered, assembled and tested at
our factory with the gas turbine generator unit.



# SHELL OIL COMPANY Bakersfield, California

To date, Stewart & Stevenson has supplied a total of four LM2500 Gas Turbine Generator Sets to Shell Oil Company for co-generation service. The waste heat from the boiler is being utilized to generate steam for enhanced oil recovery. Three of these units are currently operating on residual gas from the adjacent oil field. Each unit is designed with an evaporative cooler to increase power output during higher ambient temperature days.



## CITY OF WELLINGTON Wellington, Kansas

Stewart & Stevenson was contracted to supply and install all equipment required for this remotely-controlled power station installed for peaking service. The complete scope of supply included the LM2500 Gas Turbine Generator, a pre-wired and prefabricated control building with all electrical equipment, a black start Diesel generator set, a liquid fuel forwarding skid and a fuel gas compressor. The power station is unmanned and operated via remote control several miles away.

P-K000678

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## INSTALLATIONS



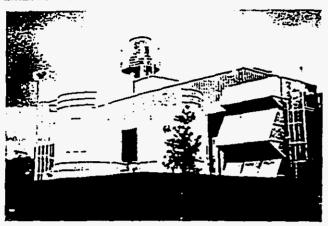
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# STEWART & STEVENSON LM2500 INSTALLATIONS



SIGNAL ENERGY Norwalk, California

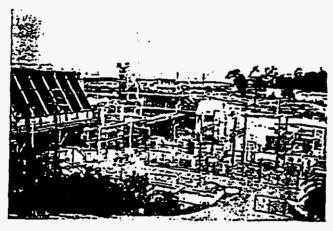
Stewart & Stevenson was contracted by Signal Energy to provide the first direct steam injected LM2500 Gas Turbine. The unit is located within a building with only the air filtration system exposed. A special feature of the unit is a chiller coil installed in the air inlet system to lower the temperature of the combustion air for greater power output. The same coil system can be used in the winter for anticing by circulating hot water.



IMPELL/OLS ENERGY

Chino, California

The Stewart & Stevenson LM2500 Gas Turbine Generator provides 40,000 #/hr of steam for heating and maintenance for the California Institution of Men. Twenty-eight MW of electricity is sold to the local utility company. Stewart & Stevenson is under contract for the operation and maintenance of the complete co-generation plant.



IMPELL/OLS ENERGY

Camarillo, California

Stewart & Stevenson provided this LM2500 Gas Turbine Generator to be used in a combined cycle/co-generation application. The Camarillo State Hospital is supplied with 40,000 #/hr of steam for all hospital functions; 28 MW of electricity produced from the combined output of the gas turbine generator and steam turbine generator are sold to the local utility, Southern California Edison. Stewart & Stevenson is under contract for the operations and maintenance of the complete co-generation plant.



BECON/STONE & WEBSTER/CHEVRON

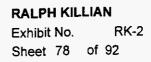
Bakersfield, California

Stewart & Stevenson provided two LM2500 Generator Sets to Chevron Oil, USA. Steam for the heat recovery boiler will be used for enhanced oil recovery and the power will be sold to the local utility. This particular site was constructed by Becon and engineered by Stone & Webster. Extensive tests were conducted at the Stewart & Stevenson factory such as response to load rejection/acceptance, automatic synchronization and parallel operation, unit response to flameout of the gas turbine, vibration signature, etc. The data taken during the factory test can be used for a beginning basis for trend analysis.

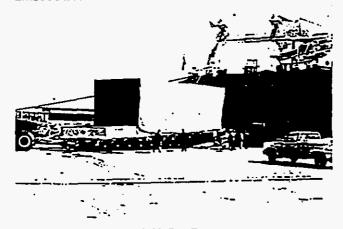
## INSTALLATIONS



STEWART & STEVENSON LM2500 INSTALLATIONS



Docket 95-0110-EI

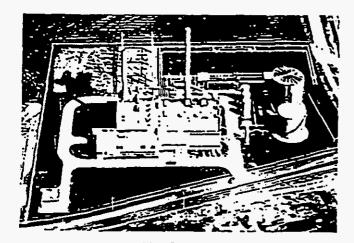


C.H.E.S.F.

Camacari, Bahia, Brazil

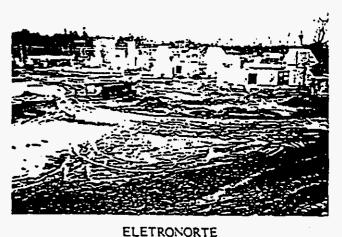
Stewart & Stevenson provided a total of six LM2500 Gas

Turbine Generators for prime power use in Brazil. Along
with each unit, a prefabricated and pre-wired control
building was supplied in order to offer the quickest on-line
date possible. The units are supplying continuous power
to the utility grid to supplement the hydro-electric power
which is operating below full capacity in the region.



N.V. PNEM Helmond, The Netherlands

Stewart & Stevenson supplied, to the largest utility in The Netherlands, a second LM2500 Generator Set for use in their district heating power station. Factory packaging and full load testing in Houston will assure a lower risk project schedule. After utilizing all the waste heat, the thermal efficiency of the LM2500 plant is 90%. The units are started at 7 AM and stopped by 10 PM every day.



Porto Velho, Brazil

Stewart & Stevenson, in association with a Brazilian contractor, accepted a turnkey contract to provide three LN12500's for prime power in a remote area of Brazil. The consortium was formed with local companies in order to provide as much Brazilian content as possible. The units are supplying electricity directly to the utility grid to provide continuous power to the City of Porto Velho, Brazil (population 300,000). The units were designed to operate as synchronous condensers for future use as power factor controllers when hydro-electric power becomes available. Stewart & Stevenson also supplied a black start Diesel generator and a pre-wired control and switchgear building with each unit.





UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

LMI5000 gas turbine generator sets are utilized at

Two LM5000 gas turbine generator sets are utilized at this combined cycle power station providing steam to the University of Northern Colorado and electricity to the local electric utility grid. Full load factory string testing of the complete generator sets simplified the installation and commissioning of Stewart & Stevenson's first LM5000 packages.



February 27, 1991

Panda Energy Corporation 4100 Spring Valley, Suite 1001 Dallas, TX 75234

Docket 95-0110-EI RALPH KILLIAN

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Attention: Mr. Darol Lindoff

Exhibit No. RK-2 Sheet 79 of 92

Reference:

Equipment Commitment Letter

1-V84.2 HRSG

150 MW Lakeland, Florida Project

### Gentlemen:

We are pleased to confirm that we can completely deliver all the HRSG equipment for the above referenced project to the Florida jobsite by November, 1992.

Please note that our shop capacity and our field erection capabilities are extensive and we have considerable flexibility in our delivery potential. We will be pleased to work with you to meet your delivery requirements.

Yours very truly,

NOOTER/ERIKSEN COGENERATION

SYSTEMS, INC.

Donald H. Lunge, P.E. General Sales Manager

DHL/kk

cc:

Steve Moss

Vern Eriksen

Pro-Tec Equipment

# **SIEMENS**

February 27, 1991

Docket 95-0110-Ei

RALPH KILLIAN

Exhibit No. RK-2

Sheet 80 of 92

Mr. Darol Lindloff
Panda Energy Corporation
4100 Spring Valley, Suite 1001
Dallas, Texas 75244

Subject: Kathleen Co-Generation Project

Near Lakeland, Florida

Dear Mr. Lindloff:

Siemens Energy & Automation, Inc. has held discussions with Panda Energy Corporation regarding the above project. After conferring with our Power Transformer Operation we can confirm that if we receive a purchase order, complete specifications and release to manufacture by July 31, 1991, we can deliver to the Lakeland site in September, 1992 one (1) 120MVA class power transformer of the general parameters discussed.

Sincerely,

Account Manager

DLM/www

# SIEMENS

February 27, 1991

Mr. Darol Lindloff
Panda Energy Corporation
4100 Spring Valley, Suite 1001
Dallas, TX 75244

Dear Mr. Lindloff:

Siemens Power Corporation has held serious discussions with Panda Energy Corporation regarding Panda's Kathleen cogeneration project near Lakeland, Florida. As a result of these discussions and negotiations, Siemens can deliver one 50 - 70 MW steam turbine generator to the Lakeland site in December of 1992.

Very tryly yours

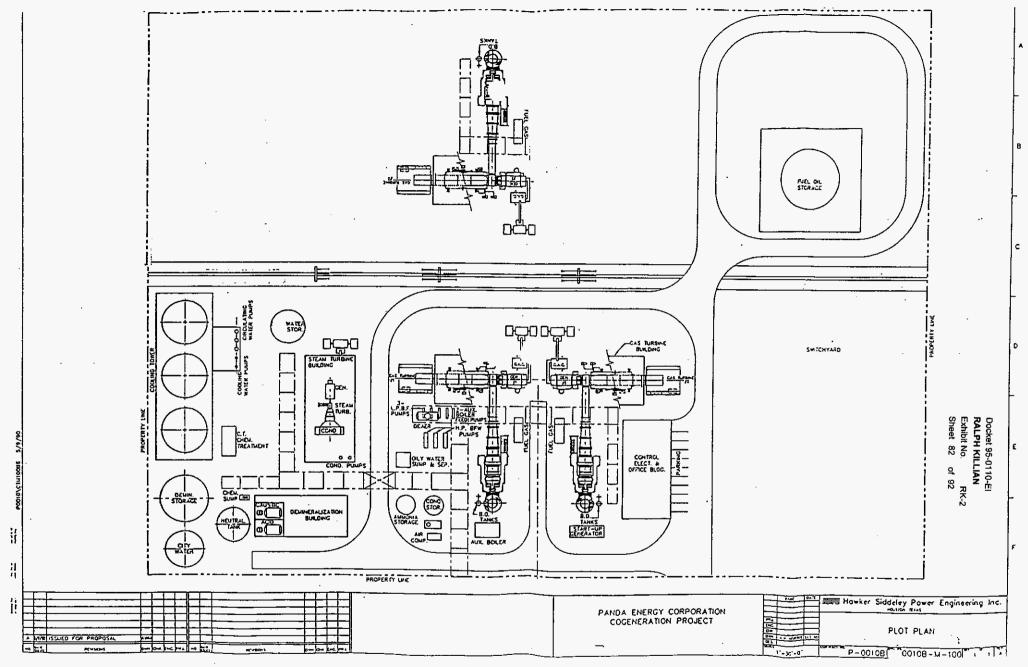
Gary M. Cook

Regional Vice President

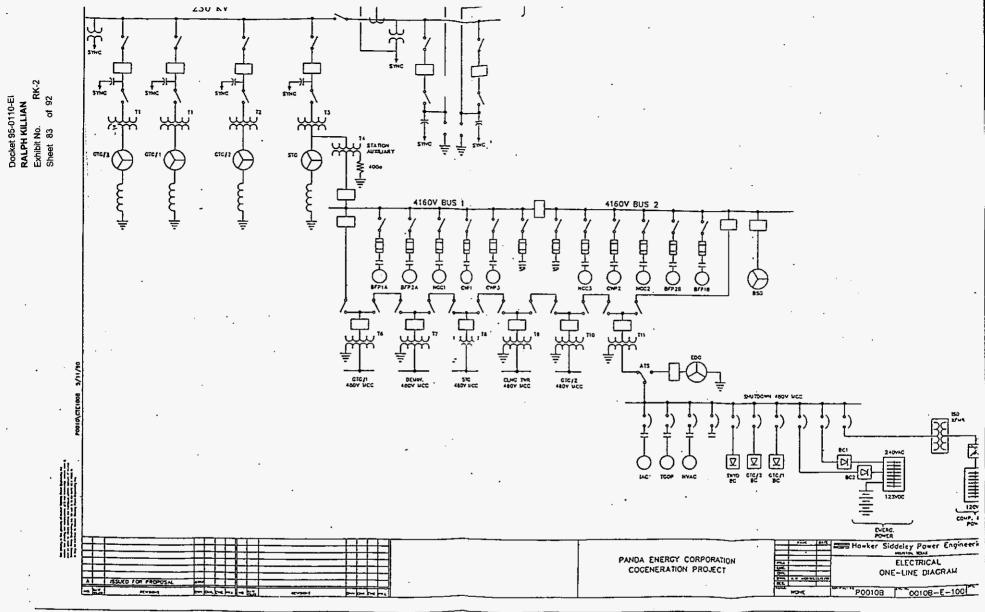
Docket 95-0110-EI
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Sheet 81 of 92

GMC:Im

Siemens Power Corporation



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RALPH KILLIAN
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October 7, 1991

Secretary
Federal Energy Regulatory Commission
825 North Capital Street
Washington, D.C. 20426

RE: Panda Energy Corporation
Amended and Restated Notice of
Self-Certification As a
Qualifying Facility
74.9 MW Natural Gas Fired Facility
Lakeland, Florida

Dear Sir/Madam:

Enclosed herewith you will find four (4) copies of subject notice. This notice will amend and restate a previous Self-Certification, No. 91-62 which was filed by Panda Energy Corporation and listed the estimated net maximum design capacity at 150 MW and steam generation at 50,000 lbs. per hour.

We would appreciate receiving a copy of this notice from you reflecting the assigned QF number.

If there are any questions or problems, please contact me immediately at the number listed below.

Very truly yours,

Edward R. Gwynn General Counsel

Enclosures

Docket 95-0110-El

Exhibit No. RK-2 Sheet 85 of 92

4100 Spring Valley. Suite 1001 Dallas, Texas 75244 214/980-7159 FAX 214/980-6815

# UNTTED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Panda-F	Cathleen
Limited	Partnership

Docket No. QF	
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Amended and Restated
Notice of Self-Certification As a
Oualifying Cogeneration Facility

Pursuant to Section 292.207 of the regulations of the Federal Energy Regulatory Commission (the "Commission"), Panda-Kathleen Limited Partnership ("Panda") hereby files an amened and restated notice of self-certification as a qualifying cogeneration facility.

Location of the Facility And Identification of the Applicant

The cogeneration facility (the "Facility") will be located at the plant site of Erly Juice, Inc., 4100 Frontage Road South, Lakeland, Florida 33802-2004.

The owner of the Facility will be Panda-Kathleen Limited Partnership, a partnership formed under the laws of the State of Delaware.

The address of Panda-Kathleen Limited Partnership is:

Panda-Kathleen Limited Partnership 4100 Spring Valley Road Suite 1001 Dallas, Texas 75244

## Description of the Facility

The Facility is a combined cycle cogeneration facility, incorporating three (3) gas fired combustion turbine generators, three (3) waste heat recovery steam generators and one (1) extraction induction steam turbine generator.

The Facility will have an estimated net maximum capacity at design conditions of 74.9 MW. The electrical output of the Facility will be sold to Florida Power Corporation ("FPC") with an interconnect directly into the FPC transmission system. The Facility will generate approximately 15,000 lbs. per hour of steam which will be sold to Erly Juice, Inc. for use in the processing of citrus juices.

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## Primary Energy Source

The Facility will be fueled by Natural Gas and is expected to commence operation in 1997 or before.

Panda-Kathleen Limited Partnership has submitted this notice of self-certification as a qualifying cogeneration facility to be executed by its general partner's corporate official and general counsel on this 7th day of October 1991.

Respectfully submitted, Panda-Kathleen Corporation, for Panda-Kathleen Limited Partnership

Edward R. Gwynn General Counsel

Docket 95-0110-Ei
RALPH KILLIAN

Exhibit No. RK-2 Sheet 87 of 92

PANDA ENERGY CORPORATION
The Independent Power Company

October 29, 1991

Mr. T. I. Wetherington Corporate Cogeneration Engineer Florida Power Corporation 3201 34th St. S. MAC B3L St. Petersburg, FL 33733

Dear Mr. Wetherington:

This memorandum describes Panda's proposed plan for financing the development and construction of the 75 MW gas-fired cogeneration facility near Lakeland, Florida ("Kathleen Project"). The development financing for Panda's Rosemary Project is described below. Panda has every expectation that a similar financing will be available to Panda for the Kathleen Project especially in view of the substantial improvements in Panda's financial status and financing capabilities since the financing of the Rosemary Project.

## Rosemary Financing

In January 1989, Panda executed a power sales agreement with Virginia Power. After discussion and negotiation with several equity-oriented financiers, Panda selected a proposal from Heller Financial, Inc. to provide an \$18 million development bridge loan. Major terms of the financing follow:

Project:

Gas-fired 175 megawatt cogeneration facility in Roanoke Rapids, NC. The facility sells electric capacity and energy to Virginia Power under a 25-year power purchase agreement and sells steam to The Bibb Company under a steam and chilled water sales agreement.

Development Loan:

A multiple advance bridge loan facility in the aggregate principal amount of \$18 million to be used prior to the arrangement and closing of the project construction loan.

Up to: \$5 million for development

expenses

\$11 million for equipment downpayments

\$ 2 million interest expense

\$18 million

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Sheet 88 of 92

4100 Spring Valley, Suite 1001 Dallas, Texas 75244 214/980-7159 FAX 214/980-6815 Subordinated Loan: A subordinated credit facility (commitment obtained with development bridge loan) repayable over 15 years with equal annual installments.

The development bridge loan facility was utilized to fund substantially all development expenditures, including:

-permitting/environmental -preliminary engineering

-major equipment downpayments

-insurance

-property acquisition

-project management

This financing was obtained prior to receipt of permits. Panda signed a construction contract in May 1989, received the air permit in August, began construction in October, closed permanent financing in October, completed a gas pipeline in September 1990 and reached commercial operation in December 1990.

## Recent Developments Affecting Panda's Financing Capability

Panda is currently offering to sell an equity interest in the Rosemary Project for the purpose of refinancing the subordinated loans. The offering is expected to close in the fourth quarter of 1991 and to provide up to \$30 million to Panda of which \$10 million would be available to fund development of the Kathleen Project. In addition, cash flow from Panda's retained equity interest in the Rosemary Project may also be used for development expenditures.

Panda is also evaluating the issuance of short-term commercial paper to fund certain development costs. The commercial paper would have an ultimate maturity of 3 years and would be supported by a letter of credit.

There has been a tremendous amount of interaction among Panda and the financial community, equipment suppliers and EPC groups. Several arrangements have been negotiated as a result of these discussions which are intended to facilitate financing during the development period of the Kathleen Project.

Payment schedules for major equipment (CT, HRSG, ST) have been proposed by suppliers which will allow equipment to be ordered well in advance without significant payment until construction financing is obtained. However, these arrangements will contain steep penalty provisions in the event the Project is canceled. Several major EPC firms have offered to perform preliminary engineering and design in support of permitting and equipment selection without significant payment until construction financing is obtained. In addition, Panda has received positive reaction to proposals that the turn-key contractor fund portions of the construction costs until commercial operation is achieved. Panda has obtained firm

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bids from environmental firms for the permitting work and has already begun the initial phases of permitting. An O&M contractor has offered to provide equity to the project, together with a competitive O&M contract.

The financial institutions are another source of development capital. This group includes the capital companies of major industrial firms, insurance companies, pension funds, and banking entities. These institutions have made substantial investments in the development of cogeneration facilities in the past and will likely continue to do so. Again, several such firms have expressed their interest in providing development capital for the Kathleen Project.

The information provided above is presented to demonstrate Panda's capability to fund development of the Kathleen Project and/or availability of third-party capital to fund the development effort. Panda intends to

- a. fund initial expenditures for permitting, engineering and design, to the extent not deferred by arrangement with the vendors, from internally generated funds
- b. fund equipment downpayments, to the extent required, from a third-party financial entity in the form of a development loan.
- c. refinance the development expenditures described in a. and b. with a construction loan expected to be obtained approximately eighteen months prior to commercial operations.

As it previously demonstrated with the Rosemary Project, Panda is confident that it will be able to arrange all required financing for development of the Kathleen Project.

Letters from The Fuji Bank, Limited and Heller Financial, Inc. relating to various aspects of Panda's ability to obtain development and term financing for the Kathleen Project are attached. Please do not hesitate to contact me or others at Panda for further discussion of the proposed financing plan.

Sincerely,

Robert A. Wolf (Chief Financial Officer

RAW/lc

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International Project Finance Division New York Office Two World Trade Center New York, NY 1004R ful. 212 898 2020 Fax: 212-321-3413

June 22, 1990

Mr. Peter E. Schaub Manager, Supply Side Resources Potomac Electric Power Company 1900 Pennsylvania Avenue, N.W. Washington, D.C. 20068

Dear Mr. Schaub:

Mr. Robert Wolf of Panda Energy Corporation ("Panda") has informed us of your request for references. To that end, and on behalf of Panda, The Fuji Bank, Limited ("Fuji Bank") is unreservedly pleased to do so.

By way of background, Fuji Bank has been seriously involved with Panda for approximately two years, and is presently providing development and construction capital in excess of \$130,000,000 for Panda's 175 megawatt Panda-Rosemary Cogeneration Project in Roanoke Rapids, North Carolina.

Fuji Bank is impressed with Panda's management, professionalism, attention to details, and the company's dedication to achieving ambitious goals. Panda's performance has been consistent, timely and according to plan. Fuji Bank views Panda as a valued client and a meaningful relationship and is therefore pursuing additional project opportunities with the company.

If you have additional questions or wish to discuss this further, please feel free to contact me at the above address or by phone at (212) 898-2635.

Since ely,

Vice President

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Raymond F. Weber Senior Vice Prenipent

August 23, 1990

Mr. Peter E. Schaub Manager, Supply Side Resources Potomac Electric Power Company 1900 Pennsylvania Ave., N.W. Washington, D.C. 20068

Dear Mr. Schaub:

I have known Dallas-based Panda Energy Corporation since 1984 and as the Manager of Heller Financial's Project Investment & Advisory Division have recently worked with Panda Energy to provide them with a \$23 million pre-construction bridge loan and a \$6 million project subordinated loan for a \$122 million, 180 megawatt gas-fired power plant in Roanoke Rapids, North Carolina, USA. The Fuji Bank, Ltd. Heller Financial's parent company, provided the remaining fundings for this project during construction.

Panda Energy, to date, has successfully performed its project development responsibilities in accordance with Heller Financial's expectations during the development and construction of this power plant. Personally I believe Panda Energy's senior level managers, specifically Robert Carter and Hans vanKuilenburg are some of the most honest and ethical developers I have been associated with in my eight years in the U.S. energy project finance marketplace. Should you wish to contact me directly with specific questions, I can be reached at the above referenced phone number.

Best regards,

RayWeller

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FPSC DOCKET NO. 950110-EI EXHIBIT NO. \_\_\_\_RK-4

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## NEGOTIATED CONTRACT FOR THE PURCHASE OF FIRM CAPACITY AND ENERGY FROM A QUALIFYING FACILITY

between

and

FLORIDA POWER CORPORATION

Docket 95-0110-EI

RALPH KILLIAN

Exhibit No. RK-4

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# NEGOTIATED CONTRACT FOR THE PURCHASE OF FIRM CAPACITY AND ENERGY FROM A QUALIFYING FACILITY

This Agreement ("Agreement") is made and entered by and between						
, a, having its principal place of business at						
(hereinafter referred to as the "QF"), and Florida Power						
Corporation, a private utility corporation organized under the laws of the State of Florida,						
having its principal place of business at St. Petersburg, Florida (hereinafter referred to as						
the "Company"). The QF and the Company may be hereinafter referred to individually						
as a "Party" and collectively as the "Parties."						
WITNESSETH:						
WHEREAS, the QF desires to sell, and the Company desires to purchase,						
electricity to be generated by the Facility and made available for sale to the Company,						
consistent with FPSC Rules 25-17.080 through 25-17.091 in effect as of the Execution Date;						
and						
WHEREAS, the QF will engage in interconnected operation of the QF's						
generating facility with either the Company or with [utility]'s system (hereinafter referred						
as the "Transmission Service Utility") which is directly interconnected at one or more points						
with the Company.						
NOW, THEREFORE, for mutual consideration, the Parties covenant and						
agree as follows:						
•						

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# ARTICLE I: DEFINITIONS

As used in this Agreement and in the Appendices hereto, the following capitalized terms shall have the following meanings:

- Appendices means the schedules, exhibits and attachments which are appended hereto and are hereby incorporated by reference and made a part of this Agreement.
  - 1.1.1 Appendix A sets forth the Company's Interconnection Scheduling and Cost Procedures.
  - 1.1.2 Appendix B sets forth the Company's Parallel Operating Procedures.
  - 1.1.3 Appendix C sets forth the Company's Rates for Purchase of Firm Capacity and Energy from a Qualifying Facility.
  - 1.1.4 Appendix D sets forth the Company's Transmission Service Standards.
  - 1.1.5 Appendix E sets forth FPSC Rules 25-17.080 through 25-17.091 in effect as of the Execution Date.
- 1.2 <u>Accelerated Capacity Payment</u> means payments based upon the accelerated payment rates in Appendix C.
- 1.3 As-Available Energy Cost means the energy rate calculated in accordance with FPSC Rule 25-17.0825 as such rule may be amended from time to time.

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- 1.4 Avoided Unit Fuel Reference Plant means that Company unit(s) whose delivered price of fuel shall be used as a proxy for the fuel associated with the avoided unit type selected in section 8.2.1 hereof as such unit(s) are defined in Appendix C.
- associated with the unit type selected in section 8.2.1 hereof as it is defined in Appendix C.
- 1.6 Avoided Unit Variable O & M means the variable operation and maintenance expense associated with the unit type selected in section 8.2.1 hereof as it is defined in Appendix C.
  - 1.7 BTU means British thermal unit.
- 1.8 <u>Capacity Account</u> means that account which complies with the procedure in section 8.5 hereof.

1.9 <u>Capacity Payment Adjustment</u> means the value calculated pursuant to Appendix C.

1.10 Commercial In-Service Status means (i) that the Facility is in compliance with all applicable Facility permits and contractes (ii) that the Facility has maintained an hourly KW output, as metered at the Point of Delivery, equal to or greater than the Committed Capacity for a twenty-four (24) hour period; and (iii) that such twenty-four (24) hour period is reasonably reflective of the Facility's day to day operations.

hours specified in Appendix a of two consentive days.

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- 1.11 Committed Capacity means the KW capacity, as defined in Article VI hereof, which the QF has agreed to make available on a firm basis at the Point of Delivery.
- Factor, as defined in Article II hereof, which the QF has agreed to make available on a firm basis at the Point of Delivery.

1.13 Company's Interconnection Facilities means all equipment located on the Company's side of the Point of Delivery, including without limitation, equipment for connection, switching, transmission, distribution, protective relaying and safety provisions which, in the Company's judgment, is required to be installed for the delivery and measurement of electric energy into the Company's system on behalf of the QF, including all metering and telemetering equipment installed for the measurement of such energy regardless of its location in relation to the Point of Delivery.

- 1.14 <u>Completion Security Guaranty</u> means the deposits or other assurances as specified in section 13.1 hereof.
- order approving this Agreement, without change, finding that it is prudent and cost recoverable by the Company through the FPSC's periodic review of fuel and purchased power costs, which order shall be considered final when all opportunities for requesting a hearing, requesting reconsideration, requesting clarification and filing for judicial review have expired or are barred by law.
- 1.16 <u>Contract In-Service Date</u> means the date, as specified in Article IV hereof, by which the QF has agreed to achieve Commercial In-Service Status.

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- 1.18 <u>Control Area</u> means a utility system capable of regulating its generation in order to maintain its interchange schedule with other utility systems and contribute its frequency bias obligation to the interconnection.
- 1.19 <u>Execution Date</u> means the latter of the date on which the Company or the QF executes this Agreement.
- 1.20 <u>Facility</u> means all equipment, as described in this Agreement, used to produce electric energy and, for a cogeneration facility, used to produce useful thermal energy through the sequential use of energy and all equipment that is owned or controlled by the QF required for parallel operation with the interconnected utility.
- 1.21 <u>FERC</u> means the Federal Energy Regulatory Commission and any successor.
- 1.22 Firm Energy Cost means the energy rate calculated in accordance with section 9.1.2 hereof.
- 1.23 Florida-Southern Interface means the points of interconnection between the electric Control Areas of (1) Florida Power & Light Company, Florida Power Corporation, Jacksonville Electric Authority, and the City of Tallahassee and (2) Southern Company.

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- 1.24 Force Majeure Event means an event or occurrence that is not reasonably foreseeable by a Party, is beyond its reasonable control, and is not caused by its negligence or lack of due diligence, including, but not limited to, natural disasters, fire, lightning, wind, perils of the sea, flood, explosions, acts of God or the public enemy, strikes, lockouts, vandalism, blockages, insurrections, riots, war, sabotage, action of a court or public authority, or accidents to or failure of equipment or machinery, including, if applicable, equipment of the Transmission Service Utility.
  - 1.25 FPSC means the Florida Public Service Commission and any successor.
- 1.26 <u>Fuel Multiplier</u> means that value associated with the unit type selected in 8.2.1 as it is defined in Appendix C.
  - 1.27 Import Capability means the capability to import power at the Florida-Southern Interface, giving consideration to the various limitations imposed upon those facilities by the electric systems to which they are directly or indirectly connected.
  - 1.28 <u>Interconnection Costs</u> means the actual costs incurred by the Company for the Company's Interconnection Facilities, including, without limitation, the cost of equipment, engineering, communication and administrative activities.
  - 1.29 Interconnection Company would have incurred if it were not purchasing Committed Capacity and electric energy but instead itself generated or purchased from other sources an equivalent amount of Committed Capacity and electric energy and provided normal service to the Facility as if it were a non-generating customer.
    - 1.30 KW means one (1) kilowatt of electric capacity.
    - 1.31 KWH means one (1) kilowatthour of electric energy.

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Minimum On-Peak Capacity Factor means that value which is associated with the unit type selected in section 8.2.1 as it is defined in Appendix C. MWH means one (1) megawatthour of electric energy. 1.34 On-Peak Hours means those daily time periods specified in Appendix Cx or the hour that the longing would have quested a mist with the characteristics defined in section 1.1.2(i) hereof. On-Peak Capacity Factor means the ratio calculated pursuant to section 8.3 hereof. Operational Event of Default means an event or circumstance defined as such in Article XV hereof. Operational Security Guaranty means the deposits or other assurances as specified in section 13.3 hereof. 1.38 Performance Adjustment means the value calculated pursuant to Appendix C. 1.39 Point of Delivery means the point(s) where electric energy delivered to the Company pursuant to this Agreement enters the Company's system. Point of Metering means the point(s) where electric energy made

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Point of Ownership means the interconnection point(s) between the

available for delivery to the Company is measured.

Facility interconnected utility.

- defined as such in Article XV hereof.
- 1.43 Qualifying [Small Power Production or Cogeneration Facility] means a facility that meets the requirements defined in [section 3(17)(C) or section 3(18)(B)] of the Federal Power Act, as amended by section 201 of the Public Utility Regulatory Policies Act of 1978, and that is certified as such by the FERC pursuant to applicable FERC regulations.
- 1.44 <u>Term</u> means the duration of this Agreement as specified in Article IV hereof.
- 1.45 <u>Transmission Service Agreement</u> means that agreement between the QF and the Transmission Service Utility which meets the requirements of Appendix D.

#### ARTICLE II: TRANSMISSION LIMITATIONS

- 2.1 For a QF with a Facility located north of the latitude of the Company's Central Florida Substation, the Company will use its best efforts to obtain an amount of Import Capability equal to the diminution of Import Capability caused by the Facility during the Term of this Agreement and the QF agrees to reimburse the Company for the costs of such Import Capability.
- 2.2 The Company will notify the QF in writing of the availability and cost of the required Import Capability within sixty (60) days after the Execution Date. Such reimbursement shall not be considered as a reduction in the payments made by the Company to the QF for capacity and energy under this Agreement. The QF may terminate this Agreement after receiving such notification without penalty prior to the date that the Completion Security Guaranty is due pursuant to section 13.1 hereof.

# ARTICLE III: FACILITY

	3.1	The	Facility	shall	be	located	ın	Secti	on _				
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Facility shall	be desi	gned	and cons	tructe	d by	the QF	or i	its age	nts a	t the (	QF's sole	exp	ense.

- 3.2 Throughout the Term of this Agreement, the Facility shall be a Qualifying [Cogeneration or Small Power Production] Facility.
- 3.3 Except for Force Majeure Events declared by the Facility's fuel supplier(s) or fuel transporter(s), the Facility's ability to deliver its Committed Capacity shall not be encumbered by interruptions in its fuel supply.
- 3.4 The QF shall either (i) arrange for and maintain standby electrical service under a firm tariff, or (ii) maintain the ability to restart and/or continue operations during interruptions of electric service or (iii) maintain multiple independent sources of generation.
- 3.5 From the Execution Date through the Contract In-Service Date, the QF shall provide the Company with progress reports on the first day of January, April, July and October which describe the current status of Facility development in such detail as the Company may reasonably require.

#### ARTICLE IV: TERM AND MILESTONES

shall expire at 24:00 hours on the last day of [month. year], unless extended pursuant to section 4.2.4 hereof or terminated in accordance with the provisions of this Agreement. Upon termination or expiration of this Agreement, the Parties shall be relieved of their obligations under this Agreement except for the obligation to pay each other all monies under this Agreement, which obligation shall survive termination or expiration. Each Party shall use its best efforts to enforce the validity of this Agreement and to expedite FPSC action on the Company's request for FPSC approval of this Agreement. The Company shall submit this Agreement and related documentation to the FPSC for approval within ten (10) days of the Execution Date.

4.2 The Parties agree that time is of the essence and that: (i) the QF shall execute the Transmission Service Agreement, if applicable, which shall be approved or accepted for filing by the FERC on or before the first day of [month, year]; (ii) the Construction Loan Date shall occur on or before the first day of [month, year]; and (iii) the Facility shall achieve Commercial In-Service Status on or before the first day of [month, year], which date shall constitute the Contract In-Service Date. These three dates shall not be modified except as provided in section 4.2.1, 4.2.2, 4.2.3 and 4.2.5 hereof.

4.2.1 Upon written request by the QF, these three dates each may be extended on a day-for-day basis for each day that the Contract Approval Date exceeds one hundred twenty (120) days after the date the Company submits this Agreement and related documentation to the FPSC for approval; provided, however, that the QF's notice shall specifically identify the date and duration for which extension is being requested; and provided, further, that the maximum extension of such date shall in no event exceed a total of one hundred and eighty (180) days. Such delay shall not be considered a Force Majeure Event for purposes of this Agreement.

4.2.2 Upon written request by the QF not more than sixty (60) days after the declaration of a Force Majeure Event by the QF, which event contributes proximately and materially to a delay in the QF's schedule, these three dates each may be extended on a day-for-day basis for each day of delay so caused by the Force Majeure Event; provided, however, that the QF shall specifically identify: (i) each date for which extension is being requested; and (ii) the expected duration of the Force Majeure Event; and provided further, that the maximum extension of any of these three dates shall in no event exceed a total of one hundred and eighty (180) days, irrespective of the nature or number of Force Majeure Events declared by the QF.

4.2.3 The Contract In-Service Date shall be extended on a day-for-day basis for any delays directly attributable to the Company's failure to complete its obligations hereunder.

4.2.4 If the Contract In-Service Date is extended pursuant to sections 4.2.1, 4.2.2 or 4.2.3 hereof, then the Term of the Agreement may be extended for the same number of days upon separate written request by the QF not more than thirty (30) days after the Contract In-Service Date.

4.2.5 The QF shall have the one-time option of accelerating the Contract In-Service Date by up to six (6) months upon written notice to the Company not less than thirty (30) days before the accelerated Contract In-Service Date; provided, however, that (i) the QF shall be in compliance with all applicable requirements of this Agreement as of such earlier date; and (ii) the Company's Interconnection Facilities can reasonably be expected to be operational as of such earlier date.

# ARTICLE V: OF OPERATING RESPONSIBILITIES

- 5.1 During the Term of this Agreement, the QF shall:
  - 5.1.1 Have the sole responsibility to, and shall at its sole expense, operate and maintain the Facility in accordance with all requirements set forth in this Agreement.
  - 5.1.2 Provide the Company prior to October 1 of each calendar year the estimated amounts of electricity to be generated by the Facility and delivered to the Company for each month of the following calendar year, including the estimated time, duration and magnitude of any planned outages or reductions in capacity.
  - 5.1.3 Promptly notify the Company of any changes to the yearly generation and maintenance schedules.
  - 5.1.4 Provide the Company by telephone or facsimile prior to 9:00 A.M. of each day an estimate of the hourly amounts of electric energy to be delivered at the Point of Delivery for the next succeeding day.
  - 5.1.5 Coordinate scheduled outages and maintenance of the Facility with the Company. The QF agrees to recognize and accommodate the Company's system demands and obligations by exercising reasonable efforts to schedule outage and maintenance during such times as are designated by the Company.

5.1.6 Comply with reasonable requirements of the Company regarding day-to-day or hour-by-hour communications with the Company or with the Transmission Service Utility relative to the performance of this Agreement.

5.2 The estimates and schedules provided by the QF under this Article V shall be prepared in good faith, based on conditions known or anticipated at the time such estimates and schedules are made, and shall not be binding upon either Party; provided, however, that the QF shall in no event be relieved of its obligation to deliver Committed Capacity under the terms and conditions of this Agreement.

## ARTICLE VI: PURCHASE AND SALE OF CAPACITY AND ENERGY

6.1 Commencing on the Contract In-Service Date, the QF shall commit, sell and arrange for delivery of the Committed Capacity to the Company and the Company agrees to purchase, accept and pay for the Committed Capacity made available to the Company at the Point of Delivery in accordance with the terms and conditions of this Agreement. The QF also shall sell and deliver or arrange for the delivery of the electric energy to the Company and the Company agrees to purchase, accept, and pay for such electric energy as is made available for sale to and received by the Company at the Point of Delivery.

6.2 The Committed Capacity and electric energy made available at the Point of Delivery to the Company shall be () net of any electric energy used on the QF's side of the Point of Ownership or () simultaneous with any purchases from the interconnected utility. This selection in billing methodology shall not be changed.

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the QF has made available for sale to the Company at the Point of Delivery by reason of (i) a Force Majeure Event or (ii) pursuant to FPSC Rule 25-17.086, notice and procedural requirements of Article XXI shall apply and the Company will nevertheless be obligated to make capacity payments which the QF would be otherwise qualified to receive, and to pay for energy actually received, if any. The Company shall not be obligated to pay for energy which the QF would have delivered but for such occurrences and QF shall be entitled to sell or otherwise dispose of such energy in any lawful manner; provided, however, such entitlement to sell shall not be construed to require the Company to transmit such energy to another entity.

6.4 The QF shall not commence initial deliveries of energy to the Point of Delivery without the prior written consent of the Company which consent shall not be unreasonable withheld. The QF shall provide the Company not less than thirty (30) days written notice before any testing to establish the Facility's Commercial In-Service Status. Representatives of the Company shall have the right to be present during any such testing.

#### ARTICLE VII: CAPACITY COMMITMENT

- 7.1 The Committed Capacity shall be \_\_\_\_\_ KW, unless modified in accordance with this Article VII. The Committed Capacity shall be made available at the Point of Delivery from the Contract In-Service Date through the remaining Term of this Agreement at a Committed On-Peak Capacity Factor of \_\_\_\_\_%.
- 7.2 For the period ending one (1) year immediately after the Contract In-Service Date, the QF may, on one occasion only, increase or decrease the initial Committed Capacity by no more than ten percent (10%) of the Committed Capacity specified in section 7.1 hereof as of the Execution Date upon written notice to the Company before such change is to be effective.

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provided in section 7.4, the QF may decrease its Committed Capacity over the Term of this Agreement by amounts not to exceed in the aggregate more than twenty percent (20%) of the initial Committed Capacity specified in section 7.1 hereof as of the Execution Date. Notwithstanding any other provision of this Agreement, if less than three (3) years prior written notice is provided for any such decrease, the QF shall be subject to an adjustment to the otherwise applicable payments (except as provided in section 7.4) which shall begin when the Committed Capacity is decreased and which shall end three (3) years after notice of such decrease is provided. For each month, this adjustment shall be equal to the lesser of (i) the estimated increased costs incurred by the Company to generate or purchase an equivalent amount of replacement capacity and energy and (ii) the reduction in Committed Capacity times the applicable Normal Capacity Payment rate from Appendix C. Such adjustment shall assume that the difference between the original Committed Capacity and the redesignated Committed Capacity, during all hours of the replacement period, would operate at the On-Peak Capacity Factor at the time notice is provided.

temporarily redesignate the Committed Capacity for up to twenty-four (24) consecutive months; provided, however, that no more than one such temporary redesignation may be made within any twenty-four (24) month period unless otherwise agreed by the Company in writing. Within three (3) months after such Force Majeure Event is cured, the QF may, on one occasion, without penalty, designate a new Committed Capacity to apply for the remaining Term; provided, however, that such new Committed Capacity shall be subject to the aggregate capacity reduction limit specified in section 7.3. Any temporary or final redesignation of the Committed Capacity pursuant to this section 7.4 must, in the Company's judgment, be directly attributable to the Force Majeure Event and of a magnitude commensurate with the scope of the Force Majeure Event. Redesignations of Committed Capacity pursuant to this section 7.4 shall not be subject to the payment adjustment provisions of section 7.3.

7.5 A redesignated Committed Capacity pursuant to this Article VII shall be stated to the nearest whole KW and shall be effective only on the commencement of a full billing period.

7.6 The Company shall have the right to require that the QF, not more than once in any twelve (12) month period, re-demonstrate the Commercial In-Service Status of the Facility within sixty (60) days of the demand; provided, however, that such demand shall be coordinated with the QF so that the sixty (60) day re-demonstration period avoids, if practical, previously notified periods of planned outages and reduction in capacity pursuant to Article V.

## ARTICLE VIII: CAPACITY PAYMENTS

8.1 Capacity payments shall not commence before the Contract Approval Date and before the Contract In-Service Date and (i) until the QF has achieved Commercial In-Service Status and (ii) until the QF has posted the Operational Security Guaranty pursuant to section 13.2 hereof.

8.2 Capacity payments shall be based upon the following selections as described in Appendix C.

8.2.1	Unit	type:
	<b></b>	-3 F

- () Combustion turbine, Schedule 2
- ( ) Pulverized coal, Schedule 4, Option \_\_\_\_

# 8.2.2 Payment options:

- ( ) Normal Capacity Payments
- ( ) Accelerated Capacity Payments

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- At the end of each billing month, beginning with the first full month following the Contract In-Service Date, the Company will calculate the On-Peak Capacity Factor on a rolling average basis for the most recent twelve (12) month period, including such month, or for the actual number of full months since the Contract In-Service Date if less than twelve (12) months, based on the On-Peak Hours defined in Appendix C. The On-Peak Capacity Factor shall be calculated as the electric energy actually received by the Company at the Point of Delivery during the On-Peak Hours of the applicable period divided by the product of the Committed Capacity and the number of On-Peak Hours during the applicable period. In calculating the On-Peak Capacity Factor, the Company shall exclude hours and electric energy delivered by the QF during periods in which: (i) the Company does not or cannot perform its obligations to receive all the electric energy which the QF has made available at the Point of Delivery; or (ii) the QF's payments for electric energy are being calculated pursuant to section 9.1.1 hereof.
- 8.4 The monthly capacity payment shall be equal to the product of (i) the applicable capacity payment rate; (ii) the Committed Capacity; (iii) the ratio of the Committed On-Peak Capacity Factor to the Minimum On-Peak Capacity Factor; (iv) the Capacity Payment Adjustment; and (x) the ratio of the total number of hours in the billing period less the number of hours during which the QF is being paid for energy pursuant to section 9.1.1 to the total number of hours in the billing period.

(v) He Cepairty Discount Factor of \_\_\_

8.5 The Parties recognize that Accelerated Capacity Payments are in the nature of "early payment" for a future capacity benefit to the Company when such payments exceed Normal Capacity Payments. To ensure that the Company will receive a capacity benefit for such difference in capacity payments which have been made, or alternatively, that the QF will repay the amount of such difference in payments received to the extent the capacity benefit has not been conferred, the following provisions will apply:

without consideration of the Capacity Resident Factor.

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Note the QF is first entitled to a capacity payment, the Company shall establish a Capacity Account. Each month the Capacity Account shall be credited in the amount of the Company's Accelerate Capacity Payments and shall be debited in the amount which the Company would have paid for capacity in the month pursuant to the Normal Capacity Payment.

The monthly balance in the Capacity Account shall accrue interest at the annual rate of 9.96%, or 0.7944% per month.

The QF shall owe the Company and be liable for the credit balance in the Capacity Account. The Company agrees to notify QF monthly as to the current Capacity Account balance. Prior to receipt of Accelerated Capacity Payments, the QF shall execute a promise to repay any credit balance in the Capacity Account. The specific repayment assurance calculated for purposes of this Agreement is.

P.CS-8.5.4 The QF's obligation to pay the credit balance in the Capacity Account shall survive termination or expiration of this Agreement.

hereof, each month the Capacity Account shall be credited in the amount of any increased income taxes owed by the Company resulting from Accelerated Capacity Payments and shall be debited in the amount of any decreased income taxes owed by the Company resulting from Accelerated Capacity Payments; provided however, that such amounts are dited and debited shall be adjusted to the entent that such amounts are dited and debited shall be adjusted to the entent that such tax impacts are reflected interpretated by the Company, the Company will adjust the Capacity Account accordingly,

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#### ARTICLE IX: ENERGY PAYMENTS

9.1 For that electric energy received by the Company at the Point of Delivery each month, the Company will pay the QF an amount computed as follows:

9.1.1 Prior to the Contract In-Service Date and for the duration of an Event of Default or a Force Majeure Event declared by the QF prior to a permitted redesignation of the Committed Capacity by the QF, the QF will receive electric energy payments based on the Company's As-Available Energy Cost as calculated hourly in accordance with FPSC Rule 25-17.0825; provided, however, that the calculation shall be based on such rule as it may be amended from time to time.

9.1.2 Except as otherwise provided in section 9.1.1 hereof, for each billing month beginning with the Contract In-Service Date, the QF will receive electric energy payments based upon the Firm Energy Cost calculated on an hour-by-hour basis as follows: (i) the product of the average monthly inventory chargeout price of fuel burned at the Avoided Unit Reference Plant, the Fuel Multiplier, and the Avoided Unit Heat Rate, plus the Avoided Unit Variable O & M, if applicable, for each hour that the Company would have had a unit with these characteristics operating; and (ii) during all other hours, the energy cost shall be equal to the As-Available Energy Cost.

9.1.3 Energy payments shall be equal to the sum, over all hours of the month, of the product of each hour's energy cost as determined pursuant to section 9.1.1 hereof or section 9.1.2 hereof, whichever is applicable, and the energy received by the Company at the Point of Delivery, plus the Performance Adjustment.

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9.2 Energy payments pursuant to sections 9.1.1 and 9.1.2 nereot shad de subject to the Delivery Voltage Adjustment pursuant to Appendix C.

### ARTICLE X: CHARGES TO THE OF

- 10.1 The Company shall bill and the QF shall pay all charges applicable under this Agreement.
- hereof, the Company shall bill and the QF shall pay a monthly charge equal to any taxes, assessments or other impositions for which the Company may be liable as a result of its installation of facilities in connection with this Agreement, its purchases of Committed Capacity and electric energy from the QF or any other activity undertaken pursuant to this Agreement. Such amounts billed shall not include any amounts for which the Company would have been liable had it generated or purchased from other sources an equivalent amount of Committed Capacity and electric energy, and the company would have been liable had it generated or purchased from other sources an equivalent

by the Company, or (iii) which are account in the Capacity Account present to section 8.5.2 ARTICLE XI: METERING Lever.

measured hourly at the Point of Metering. All electric energy delivered to the Company shall be adjusted for losses from the Point of Metering to the Point of Delivery. Metering equipment required to measure electric energy delivered to the Company and the telemetering equipment required to transmit such measurements to a location specified by the Company shall be installed, calibrated and maintained by the Company and all related costs shall be charged to the QF, pursuant to Appendix A, as part of the Company's Interconnection Facilities.

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applicable requirements of FPSC Rules 25-6.052 through 25-6.060 as the same may be amended from time to time.

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# ARTICLE XII: PAYMENT PROCEDURE

12.1 Bills shall be issued and payments shall be made monthly to the QF and by the QF in accordance with the following procedures:

12.1.1 The capacity payment, if any, calculated for a given month pursuant to Article VIII hereof shall be added to the electric energy payment, if any, calculated for such month pursuant to Article IX hereof, and the total shall be reduced by the amount of any payment adjustments pursuant to section 7.3 hereof. The resulting amount, if any, shall be tendered, with cost tabulations showing the basis for payment, by the Company to the QF as a single payment. Such payments to the QF shall be due and payable twenty (20) business days following the date the meters are read.

12.1.2 When any amount is owing from the QF, the Company shall issue a monthly bill to the QF with cost tabulations showing the basis for the charges. All amounts owing to the Company from the QF shall be due and payable twenty (20) business days after the date of the Company's billing statement. Amounts owing to the Company for retail electric service shall be payable in accordance with the provisions of the applicable rate schedule.

12.1.3 At the option of the QF, the Company will provide a net payment or net bill, whichever is applicable, that consolidates amounts owing to the QF with amounts owing to the Company.

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11.2 All meter testing and related billing corrections, for electricity sold and purchased by the Company, shall conform to the metering and billing guidelines contained in the FPSC's Rules 25-6.052 through 25-6.060 and FPSC Rule 25-6.103, as they may be amended from time to time, notwithstanding that such guidelines apply to the utility as the seller of electricity.

11.3 The QF shall have the right to install, at its own expense, meeting equipment capable of measuring energy on an lonely bain at the Point of Metering. At the request of the QF, the Company provide the QF howly energy cut from the Company's system; provided that the QF agrees to reinture the Company on its cost to provide such data.

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12.1.4 Except for charges for retail electric service, any amount due and payable from either Party to the other pursuant to this Agreement that is not received by the due date shall accrue interest from the due date at the rate specified in section 13.3 hereof.

#### ARTICLE XIII: SECURITY GUARANTIES

post an Completion Security Guaranty with the Company equal to \$10.00 per KW of Committed Capacity to ensure completion of the Facility in a timely fashion as contemplated by this Agreement. The QF shall either: (i) pay the Company cash in the form of a certified check in an amount equal to the Completion Security Guaranty; or (ii) provide the Company an unconditional and irrevocable direct pay letter of credit or other promise to pay such amount upon failure of the QF to perform its obligations under this Agreement; provided that the entity issuing such promise, the form of the promise, and the means of securing payment all shall be acceptable to the Company in its sole discretion.

If option (ii) is selected, the assurance of payment is agreed to be:

payments under this Agreement through the remaining Term, the QF shall post an Operational Security Guaranty with the Company equal to \$20.00 per KW of Committed Capacity to ensure timely performance by the QF of its obligations under this Agreement.

The Operational Security Guaranty shall be each in the form of a certified checket.

This Agreement shall terminate if the Completion beauty brancity is not tendered by the QF on a before the applicable due data specified here?

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Exhibit No. RK-4 Sheet 29 of 79 The QF shall either: (i) pay the Company cash in the form of a certified check in an amount equal to the Completion Security Guaranty; or (ii) provide the Company an unconditional and irrevocable direct pay letter of credit or other promise to pay such amount upon failure of the QF to perform its obligations under this Agreement; provided that the entity issuing such promise, the form of the promise, and the means of securing payment all shall be acceptable to the Company in its sole discretion.

Furthermore, if option (ii) is selected, the Operational learning somethy shall be increased monthly as ig it had account interest present to section 13.3 hereog.

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- 13.3 All Completion and Operational Security Guaranties paid in cash to the Company shall accrue interest at a rate equal to the thirty (30) day highest grade commercial paper rate as published in the <u>Wall Street Journal</u> on the first business day of each month. Such interest shall be compounded monthly.
- Contract In-Service Date, the Company shall refund to the QF any cash Completion Security Guaranty and accrued interest within thirty (30) days thereafter and shall cancel any other form of Completion Security Guaranty which the Company has accepted in lieu of a cash deposit. If the Facility fails to achieve Commercial In-Service Status on or before the Contract In-Service Date for any reason, including Force Majeure Events, except as provided in section 4.2.2 hereof, then in addition to any other rights or obligations of the Parties, the QF shall immediately forfeit and the Company, in lieu of any other remedies, shall retain any cash Completion Security Guaranty and accrued interest, and any other form of Completion Security Guaranty which the Company has accepted in lieu of a cash deposit shall become immediately due and payable to the Company.
- termination by either Party, the Company shall refund to the QF the Operational Security Guaranty and accrued interest within thirty (30) days thereafter. Upon any earlier termination of this Agreement for any reason, including Force Majeure Events, but excluding an early termination by the QF permitted pursuant to this Agreement, then in addition to any other rights or obligation of the Parties, the QF shall immediately forfeit and the Company shall retain the Operational Security Guaranty and accrued interest.

except as provided in section 15.1.6 heren

# ARTICLE XIV: REPRESENTATIONS, WARRANTIES AND COVENANTS

14.1 The QF makes the following additional representations, warranties and covenants as the basis for the benefits and obligations contained in this Agreement:

14.1.1 The QF represents and warrants that it is a corporation. partnership or other business entity duly organized, validly existing and in good standing under the laws of the State/Commonwealth of and is qualified to do business under the laws of the State of Florida.

14.1.2 The QF represents, covenants and warrants that, to the best of the QF's knowledge, throughout the Term of this Agreement the QF will be in compliance with, or will have acted in good faith and used its best efforts to be in compliance with, all laws, judicial and administrative orders, rules and regulations, with respect to the ownership and operation of the Facility, including but not limited to applicable certificates, licenses, permits and governmental approvals; environmental impact analyses, and, if applicable, the mitigation of demonstrable environmental impacts.

14.1.3 The QF represents and warrants that it is not prohibited by any law or contract from entering into this Agreement and discharging and performing all covenants and obligations on its part to be performed pursuant to this Agreement.

14.1.4 The QF represents and warrants that there is no pending or threatened action or proceeding affecting the QF before any court, governmental agency or arbitrator that could reasonably be expected to affect materially and adversely the ability of the QF to perform its

obligations hereunder, or which purports to affect the legality, validity or enforceability of this Agreement.

14.2 All representations and warranties made by the QF in or under this Agreement shall survive the execution and delivery of this Agreement and any action taken pursuant hereto.

# ARTICLE XV: EVENTS OF DEFAULT: REMEDIES

#### 15.1 PRE-OPERATIONAL EVENTS OF DEFAULT

Any one or more of the following events occurring before the Contract InService Date for any reason, except Force Majeure Events declared by the Company, shall
constitute a Pre-Operational Event of Default and shall give the Company the right
without limitation, to exercise the remedies specified under section 15.2 hereof:

15.1.1 The Completion Security Guaranty required under Article XIII hereof is not tendered by the QF on or before the applicable due date specified in that Article.

- 15.1.2 The QF, without a prior assignment permitted pursuant to Article XXIII hereof, becomes insolvent, becomes subject to bankruptcy or receivership proceedings, or dissolves as a legal business entity.
- Company is false or misleading in any material respect when made and the QF fails to conform to said representation or warranty within sixty (60) days after a demand by the Company to do so.

Agreement, if applicable, which has been approved or accepted for filing by the FERC on or before the date specified in Article IV hereof, as extended only pursuant to said Article IV.

15.1.5 The QF fails to submit the Facility's final electrical plans pursuant to Appendix A on or before the date specified by the Company pursuant to Appendix A.

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15.1.6 The construction of the Company's Interconnection Facilities, as indicated by the schedule developed pursuant to Appendix A, section 2.1, likely will not be completed prior to the Contract Inservice Date.

#### Commencement

- 15.1.4 15.1.7 The Construction Loan Date has not occurred on or before the date specified in Article IV hereof, as extended only pursuant to said Article IV.
- Facility within sixty (60) days after the Construction Lean Date.
- before the Contract In-Service Date.
- 15.1.7 15.1.10 The QF fails to comply with any other material terms and conditions of this Agreement and fails to conform to said term and condition within sixty (60) days agree a demand by the Company to do so.

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unless the QF notifies the Company on a before the Contract of Lewise Date that it engrees to pay the Company van amount equal to \$0.15 per KW times the Committed Capacity specified in section 7.1 hereof for every day between the date that the Facility achieves Commercial by-lewise Status and the Contract on-lewise Date and the the Facility subsequently achieves Commercial to-lewise Status no later than ninety (90) days after the Contract h-lewise Date.

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# 15.2 REMEDIES FOR PRE-OPERATIONAL EVENTS OF DEFAULT

For any Pre-Operational Event of Default specified under section 15.1 hereof, the Company may, in its sole discretion and without an election of one remedy to the exclusion of the other remedy, take any of the following actions:

15.2.1 Renegotiate any applicable provisions of this Agreement with the QF when necessary to preserve its validity. If the Parties cannot execute within thirty (33) days from the date of the Parties cannot operation of Erent of Default, the Company whall have 15.2.2 Terminate this Agreement.

The right to exercise the remaining purpose the section is

#### 15.3 OPERATIONAL EVENTS OF DEFAULT

Any one or more of the following events except events caused by Force Majeure Events unless otherwise stated, occurring on or after the Contract In-Service Date shall constitute and perational Event of Default by the QF and shall give the Company the right, without limitation, to exercise the remedies under section 15.4 hereof:

15.3.1 The Operational Security Guaranty required under Article XIII is not tendered on or before the applicable due date specified in the Article.

15.3.2 The QF fails upon request by the Company pursuant to section 7.4 hereof to re-demonstrate the Facility's Commercial In-Service Status to the satisfaction of the Company.

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presuant to section 15.2.1 and 15.2.2 herez; provided, however, that the company shall frist exercise the semely premant to section 15.2.1 hereof ig the construction Comments went bate how occurred on or before the data specified in Article II hereon, an extender only promont to said Article II; (ii) the QF is diligently puroning construction of the Failey; and the QF is not in areas for any movies owed to the company pursuent to this Agreement.

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15.3.3 The QF causes the Company to incur any direct or indirect charges or from any third party and does not assume responsibility for such charges and tender payment in full within fifteen (15) days of a demand for such payment by the Company.

15.3.3 The QF fails for any reason, including Force Majeure Events, to qualify for capacity payments under Article VIII hereof for any twenty-four (24) month period.

15.3.5 The QF fails to perform or comply with any other material terms and conditions of this Agreement and frails to conform to said term and condition within thirty (60) days of the demand by the Company to do so.

Article XXIII hereof, becomes insolvent, becomes subject to bankruptcy or receivership proceedings, or dissolves as a legal business entity.

## 15.4 REMEDIES FOR OPERATIONAL EVENTS OF DEFAULT

For any Operational Event of Default specified under section 15.3 hereof, the Company may, without an election of remedias to the exclusion of other remedies, take any of the following actions:

15.4.1 Allow the QF a reasonable opportunity to cure the Operational Event of Default and suspend its capacity payment obligations upon written notice whereupon the QF shall be entitled only to energy payments calculated pursuant to section 9.1.1 hereof. Thereafter, if the Operational Event of Default is cured: (i) capacity payments shall

pursuant to section 15.4.1, 15.4.2, and 15.4.3 heren; provided, however, that the company shall just exercise the semesty pursuant to section 15.4.1 heren.

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resume and subsequent energy payments shall be paid pursuant to section 9.1.2 hereof; and (ii) the On-Peak Capacity Factor shall be calculated on the assumption that the first full month after the Operational Event of Default is cured is the first month that the On-Peak Capacity factor is calculated.

15.4.2 Terminate this Agreement.

15.4.3 Exercise all remedies available at law or in equity.

### ARTICLE XVI: PERMITS

The QF hereby agrees to seek to obtain, at its sole expense, any and all governmental permits, certificates, or other authorization the QF is required to obtain as a prerequisite to engaging in the activities provided for in this Agreement. The Company hereby agrees, at the QF's expense, to seek to obtain any and all governmental permits, certificates, or other authorization the Company is required to obtain as a prerequisite to engaging in the activities provided for in this Agreement.

### ARTICLE XVII: INDEMNIFICATION

The QF agrees to indemnify and save harmless the Company and its employees, officers, and directors against any and all liability, loss, damage, costs or expense which the Company, its employees, officers and directors may hereafter incur, suffer or be required to pay by reason of negligence on the part of the QF in performing its obligations pursuant to this Agreement or the QF's failure to abide by the provision of this Agreement. The Company agrees to indemnify and save harmless the QF and its employees, officers, and directors against any and all liability, loss, damage, cost or expense which the QF, its employees, officers, and directors may hereafter incur, suffer, or be required to pay by reason of negligence on the part of the Company in performing its

obligations pursuant to this Agreement or the Company's failure to abide by the provisions of this Agreement. The QF agrees to include the Company as an additional insured in any liability insurance policy or policies the QF obtains to protect the QF's interests with respect to the QF's indemnity and hold harmless assurance to the Company contained in Article XVII.

## ARTICLE XVIII: EXCLUSION OF INCIDENTAL CONSEQUENTIAL AND INDIRECT DAMAGES

Neither Party shall be liable to the other for incidental, consequential or indirect damages, including, but not limited to, the cost of replacement power (except as provided for in section 7.3 hereof), whether arising in contract, tort, or otherwise.

### ARTICLE XIX: INSURANCE

The provisions of this Article does not apply to a QF whose Facility is not directly interconnected with the Company's system.

19.1 In addition to other insurance carried by the QF in accordance with the Agreement, the QF shall deliver to the Company, at least fifteen (15) days prior to the commencement of any work on the Company's Interconnection Facilities, a certificate of insurance certifying the QF's coverage under a liability insurance policy issued by a reputable insurance company authorized to do business in the State of Florida naming the QF as a named insured and the Company as an additional named insured, which policy shall contain a broad form contractual endorsement specifically covering liabilities arising out of the interconnection with the Facility, or caused by the operation of the Facility or by the QF's failure to maintain the Facility in satisfactory and safe operating condition.

- 19.2 The insurance policy providing such coverage shall provide public liability insurance, including property damage, in an amount not less than \$1,000,000 for each occurrence. The required insurance policy shall be endorsed with a provision requiring the insurance company to notify the Company at least thirty (30) days prior the effective date of any cancellation or material change in the policy.
- 19.3 The QF shall pay all premiums and other charges due on said insurance policy and shall keep said policy in force during the entire period of interconnection with the Company.

### ARTICLE XX: REGULATORY CHANGES

The Parties agree that the Company's payment obligations under this 20.1 Agreement are expressly conditioned upon the mutual commitments set forth in this Agreement and upon the Company's being fully reimbursed for all payments to the QF through the Fuel and Purchased Power Costs Recovery Clause or other authorized rates or charges. Notwithstanding any other provision of this Agreement, should the Company at any time during the Term of this Agreement be denied the FPSC's or the FERC's authorization, or the authorization of any other regulatory bodies which in the future may have jurisdiction over the Company's rates and charges, to recover from its customers all payments required to be made to the QF under the terms of this Agreement, payments to the QF from the Company shall be reduced accordingly. Neither Party shall initiate any action to deny recovery of payments under this Agreement and each Party shall participate in defending all terms and conditions of this Agreement, including, without limitation, the payment levels specified in this Agreement. Any amounts initially recovered by the Company from its ratepayers but for which recovery is subsequently disallowed by the FPSC or the FERC and charged back to the Company may be off-set or credited against subsequent payments made by the Company for purchases from the QF, or alternatively, shall be repaid by the QF. If any disallowance is subsequently reversed, the Company shall

repay the QF such disallowed payments with interest at the rate specified in section 12.5 hereof to the extent such payments and interest are recovered by the Company.

20.2 If the QF's payments are reduced pursuant to section 20.1 hereof, the QF may terminate this Agreement upon thirty (30) days notice; <u>provided</u> that the QF gives the Company written notice of said termination within eighteen (18) months after the effective date of such reduction in the QF's payments.

### ARTICLE XXI: FORCE MAJEURE

21.1 If either Party because of Force Majeure Event is rendered wholly or partly unable to perform its obligations under this Agreement, other than the obligation of that Party to make payments of money, that Party shall, except as otherwise provided in this Agreement, be excused from whatever performance is affected by the Force Majeure Event to the extent so affected, provided that:

21.1.1 The non-performing Party, as soon as possible after it becomes aware of its inability to perform, shall declare a Force Majeure Event and give the other Party written notice of the particulars of the occurrence(s), including without limitation, the nature, cause, and date and time of commencement of the occurrence(s), the anticipated scope and duration of any delay, and any date(s) that may be affected thereby.

21.1.2 The suspension of performance is of no greater scope and of no longer duration than is required by the Force Majeure Event.

21.1.3 Obligations of either Party which arose before the occurrence causing the suspension of performance are not excused as a result of the occurrence.

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21.1.4 The non-performing Party uses its best efforts to remedy its inability to perform with all reasonable dispatch; <u>provided, however,</u> that nothing contained herein shall require the settlement of any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the affected Party, are contrary to its interests. It is understood and agreed that the settlement of strikes, walkouts, lockouts or other labor disputes shall be entirely within the discretion of the affected Party.

21.1.5 When the non-performing Party is able to resume performance of its obligations under this Agreement, that Party shall so notify the other Party in writing.

- 21.2 Unless and until the QF temporarily redesignates the Committed Capacity pursuant to section 7.3 hereof, no capacity payment obligation pursuant to Article VII hereof shall accrue during any period of a declared Force Majeure Event pursuant to section 21.1.1 through 21.1.5. During any such period, the Company will pay for such energy as may be received and accepted pursuant to section 9.1.1 hereof.
- 21.3 If the QF temporarily or permanently redesignates the Committed Capacity pursuant to section 7.3 hereof, then capacity payment obligations shall thereafter resume at the applicable redesignated level and the Company will resume energy payments pursuant to section 9.1.2 hereof.

### ARTICLE XXII: FACILITY RESPONSIBILITY AND ACCESS

22.1 Representatives of the Company shall at all reasonable times have access to the Facility and to property owned or controlled by the QF for the purpose of inspecting, testing, and obtaining other information deemed necessary by the Company in connection with this Agreement. Any inspections or testing by the Company shall not relieve the QF of its obligation to maintain the Facility.

22.2 In no event shall any Company statement, representation, or lack thereof, either express or implied, relieve the QF of its exclusive responsibility for the Facility and its exclusive obligations, if applicable, with the Transmission Service Utility. Any Company inspection of property or equipment owned or controlled by the QF or the Transmission Service Utility, or any Company review of or consent to the QF's or the Transmission Service Utility's plans, shall not be construed as endorsing the design, fitness or operation of the Facility or the Transmission Service Utility's equipment nor as a warranty or guarantee.

Transmission Service Utility's delivery of electric energy to the Point of Delivery at its own expense if either the Facility or the equipment of the Transmission Service Utility is rendered inoperable due to actions of the QF or its agents, or a Force Majeure Event. The Company shall reactivate the Company's Interconnection Facilities at its own expense if the same are rendered inoperable due to actions of the Company or its agents, or a Force Majeure Event, provided; however, that the QF shall reimburse the Company for any reactivation cost if the same shall be caused by a Force Majeure Event and the Company is not otherwise reimbursed through applicable incurance.

### ARTICLE XXIII: SUCCESSORS AND ASSIGNS

Neither Party shall have the right to assign its obligations, benefits, and duties without the written consent of the other Party, which shall not unreasonably withheld or delayed.

### ARTICLE XXIV: DISCLAIMER

In executing this Agreement, the Company does not, nor should it be construed to, extend its credit or financial support for the benefit of any third parties lending money to or having other transactions with the QF or any assignee of this Agreement, nor does it create any third party beneficiary rights. Nothing contained in this Agreement shall be construed to create an association, trust, partnership, or joint venture between the Parties. No payment by the Company to the QF for energy or capacity shall be construed as payment by the Company for the acquisition of any ownership or property interest in the Facility.

### ARTICLE XXV: WAIVERS

The failure of either Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights under this Agreement shall not be construed as a general waiver of any such provision or the relinquishment of any such right, but the same shall continue and remain in full force and effect, except with respect to the particular instance or instances.

### ARTICLE XXVI: COMPLETE AGREEMENT

The terms and provisions contained in this Agreement constitute the entire agreement between the Parties and shall supersede all previous communications, representations, or agreements, either verbal or written, between the Parties with respect to the Facility and this Agreement.

### ARTICLE XXVII: COUNTERPARTS

This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument.

### ARTICLE XXVIII: COMMUNICATIONS

28.1 Any non-emergency or operational notice, request, consent, payment or other communication made pursuant to this Agreement to be given by one Party to the other Party shall be in writing, either personally delivered or mailed to the representative of said other Party designated in this section, and shall be deemed to be given when received. Notices and other communications by the Company to the QF shall be addressed to:

 	 	•
 _	 	

Florida Power Corporation P. O. Box 14042 St. Petersburg, FL 33733

28.2 Communications made for emergency or operational reasons may be made to the following persons and shall thereafter be confirmed promptly in writing.

The Company:	System Dispatcher on Duty
Title: System I	Dispatcher
Telephone: (81	13)866-5888
Telecopier: (81.	
To The QF:	Name
Title:	
Telephone:	
Telecopier: (	)

To The Company System Dispotation on Duty

- 28.3 Either Party may change its representatives in sections 28.1 or 28.2 by prior written notice to the other Party.
- 28.4 The Parties' representatives designated above shall have full authority to act for their respective principals in all technical matters relating to the performance of this Agreement. However, they shall not have the authority to amend, modify, or waive any provision of this Agreement.

### ARTICLE XXIX: SECTION HEADINGS FOR CONVENIENCE

Article or section headings appearing in this Agreement are inserted for convenience only and shall not be construed as interpretations of text.

### ARTICLE XXX: GOVERNING LAW

The interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the State of Florida.

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IN WITNESS WHEREOF, the QF and the Company have caused this Agreement to be executed by their duly authorized representatives on the day and year first above written.

	Ву:	<del></del>
	Title:	····
	Date:	<del></del> -
ATTEST:	Date:	<del></del>
	The Company:	
	Ву:	
	Title:	
	Date:	

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### APPENDIX A

### INTERCONNECTION SCHEDULING AND COST RESPONSIBILITY

### 1.0 Purpose.

This appendix provides the procedures for the scheduling of construction for the Company's Interconnection Facilities as well as the cost responsibility of the QF for the payment of Interconnection Costs. This appendix applies to all QF's, whether or not their Facility will be directly interconnected with the Company's system. All requirements contained herein shall apply in addition to and not in lieu of the provisions of the Agreement.

## 2.0 <u>Submission of Plans and Development of</u> Interconnection Schedules and Cost Estimates.

QF shall specify the date it desires the Company's Interconnection Facilities to be available for receipt of the electric energy and shall provide a preliminary written description of the Facility and, if applicable, the QF's anticipated arrangements with the Transmission Service Utility, including without limitation, a one-line diagram, anticipated Facility siting data and any additional facilities anticipated to be needed by the Transmission Service Utility. Based upon the information provided, the Company shall develop preliminary written Interconnection Costs and scheduling estimates for the Company's Interconnection Facilities within sixty (60) days after the information is provided. The schedule developed hereunder will indicate when the QF's final electrical plans must be submitted to the Company pursuant to section 2.2 hereof.

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- 2.2 The QF shall submit the Facility's final electrical plans and all revisions to the information previously submitted under section 2.1 hereof to the Company no later than the date specified under section 2.1 hereof, unless such date is modified in the Company's reasonable discretion. Based upon the information provided and within sixty (60) days after the information is provided, the Company shall update its written Interconnection Costs and schedule estimates, provide the estimated time period required for construction of the Company's Interconnection Facilities, and specify the date by which the Company must receive notice from the QF to initiate construction, which date shall, to the extent practical, be consistent with the QF's schedule for delivery of energy into the Company's system. The final electrical plans shall include the following information, unless all or a portion of such information is waived by the Company in its discretion:
  - a. Physical layout drawings, including dimensions;
  - b. All associated equipment specifications and characteristics including technical parameters, ratings, basic impulse levels, electrical main one-line diagrams, schematic diagrams, system protections, frequency, voltage, current and interconnection distance;
  - c. Functional and logic diagrams, control and meter diagrams, conductor sizes and length, and any other relevant data which might be necessary to understand the Facility's proposed system and to be able to make a coordinated system;
  - d. Power requirements in watts and vars;
  - e. Expected radio-noise, harmonic generation and telephone interference factor;
  - f. Synchronizing methods; and
  - g. Facility operating/instruction manuals.
  - h. If applicable, a detailed description of the facilities to be utilized by the Transmission Service Utility to deliver energy to the Point of Delivery.

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- 2.3 Any subsequent change in the final electrical plans shall be submitted to the Company and it is understood and agreed that any such changes may affect the Company's schedules and Interconnection Costs as previously estimated.
- 2.4 The QF shall pay the actual costs incurred by the Company to develop all estimates pursuant to section 2.1 and 2.2 hereof and to evaluate any changes proposed by the QF under section 2.3 hereof, as such costs are billed pursuant to Article XII of the Agreement. At the Company's option, advance payment for these cost estimates may be required, in which event the Company will issue an adjusted bill reflecting actual costs following completion of the cost estimates.
- 2.5 The Parties agree that any cost or scheduling estimates provided by the Company hereunder shall be prepared in good faith but shall not be binding. The Company may modify such schedules as necessary to accommodate contingencies that affect the Company's ability to initiate or complete the Company's Interconnection Facilities and actual costs will be used as the basis for all final charges hereunder.

### 3.0 Payment Obligations for Interconnection Costs.

3.1 The Company shall have no obligation to initiate construction of the Company's Interconnection Facilities prior to a written notice from the QF agreeing to the Company's interconnection design requirements and notifying the Company to initiate its activities to construct the Company's Interconnection Facilities; provided, however, that such notice shall be received not later than the date specified by the Company under section 2.2 hereof. The QF shall be liable for and agrees to pay all Interconnection Costs incurred by the Company on or after the specified date for initiation of construction.

- 3.2 The QF agrees to pay all of the Company's actual Interconnection Costs as such costs are incurred and billed in accordance with Article XII of the Agreement. Such amounts shall be billed pursuant to section 3.2.1 if the QF elects the payment option permitted by FPSC Rule 25-17.087(4). Otherwise the QF shall be billed pursuant to section 3.2.2.
  - 3.2.1 Upon a showing of credit worthiness, the QF shall have the option of making monthly installment payments for Interconnection Costs over a period no longer than thirty six (36) months. The period selected is \_\_\_\_ months. Principal payments will be based on the estimated Interconnection Costs less the Interconnection Costs Offset, divided by the repayment period in months to determine the monthly principal payment. Payments will be invoiced in the first month following first incurrence of Interconnection Costs by the Company. Invoices to the QF will include principal payments plus interest on the unpaid balance, if any, calculated at a rate equal to the thirty (30) day highest grade commercial paper rate as published in the Wall Street Journal on the first business day of each month. The final payment or payments will be adjusted to cause the sum of principal payments to equal the actual Interconnection Costs.
  - 3.2.2 When Interconnection Costs are incurred by the Company, such costs will be billed to the QF to the extent that they exceed the Interconnection Costs

3.3 If the QF notities the Company in writing to interrupt or cease interconnection work at any time and for any reason, the QF shall nonetheless be obligated to pay the Company for all costs incurred in connection with the Company's Interconnection Facilities through the date of such notification and for all additional costs for which the Company is responsible pursuant to binding contracts with third parties.

## 4.0 Payment Obligations for Operation, Maintenance and Repair of the Company's Interconnection Facilities

The QF also agrees to pay monthly through the Term of the Agreement for all costs associated with the operation, maintenance and repair of the Company's Interconnection Facilities, based on a percentage of the total Interconnection Costs net of the Interconnection Costs of the

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### APPENDIX B

### PARALLEL OPERATING PROCEDURES

### 1.0 Purpose

This appendix provides general operating, testing, and inspection procedures intended to promote the safe parallel operation of the Facility with the Company's system. All requirements contained herein shall apply in addition to and not in lieu of the provisions of the Agreement.

### 2.0 Schematic Diagram

Exhibit A-1-1, attached hereto and made a part hereof, is a schematic diagram showing the major circuit components connecting the Facility and the Company's [substation] and showing the Point of Delivery and the Point of Metering and/or Point of Ownership, if different. All switch number designations initially left blank on Exhibit B-1 will be inserted by the Company on or before the date on which the Facility first operates in parallel with the Company's system.

### 3.0 Operating Standards

3.1 The QF and the Company will independently provide for the safe operation of their respective facilities, including periods during which the other Party's facilities are unexpectedly energized or de-energized.

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- 3.2 The QF shall reduce, curtail, or interrupt electrical generation or take other appropriate action for so long as it is reasonably necessary, which in the judgment of the QF or the Company may be necessary to operate and maintain a part of either Party's system, to address, if applicable, an emergency on either Party's system.
- 3.3 As provided in the Agreement, the QF shall not operate the Facility's electric generation equipment in parallel with the Company's system without prior written consent of the Company. Such consent shall not be given until the QF has satisfied all criteria under the Agreement and has:
  - submitted to and received consent from the Company of its as-built electrical specifications;
  - (ii) demonstrated to the Company's satisfaction that the Facility is in compliance with the insurance requirements of the Agreement; and
  - (iii) demonstrated to the Company's satisfaction that the Facility is in compliance with all regulations, rules, orders, or decisions of any governmental or regulatory authority having jurisdiction over the Facility's generating equipment or the operation of such equipment.
- 3.4 After any approved Facility modifications are completed, the QF shall not resume parallel operation with the Company's system until the QF has demonstrated that it is in compliance with all the requirements of section 4.2 hereof.
- 3.5 The QF shall be responsible for coordination and synchronization of the Facility's equipment with the Company's electrical system, and assumes all responsibility for damage that may occur from improper coordination or synchronization of the generator with the utility's system.

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padlock, manual disconnect switch numbers(s) and isolate the Facility's generation system without prior notice to the QF. To the extend practicable, however prior notice shall be given. Any of the following conditions shall be cause for disconnection:

- Company system emergencies and/or maintenance repair and
   construction requirements;
- 2. hazardous conditions existing on the Facility's generating or protective equipment as determined by the Company;
- 3. adverse effects of the Facility's generation to the Company's other electric consumers and/or system as determined by the Company;
- 4. failure of the QF to maintain any required insurance; or
- 5. failure of the QF to comply with any existing or future regulations, rules, orders or decisions of any governmental or regulatory authority having jurisdiction over the Facility's electric generating equipment or the operation of such equipment.
- 3.7 The Facility's electric generation equipment shall not be operated in parallel with the Company's system when auxiliary power is being provided from a source other than the Facility's electric generation equipment.
- 3.8 Neither Party shall operate switching devices owned by the other Party, except that the Company may operate the manual disconnect switch number(s) owned by the QF pursuant to section 3.6 hereof.
- 3.9 Should one Party desire to change the operating position of a switching device owned by the other Party, the following procedures shall be followed:

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- (i) The Party requesting the switching change shall orally agree with an authorized representative of the other Party regarding which switch or switches are to be operated, the requested position of each switching device, and when each switch is to be operated.
- (ii) The Party performing the requested switching shall notify the requesting Party when the requested switching change has been completed.
- (iii) Neither Party shall rely solely on the other party's switching device to provide electrical isolation necessary for personnel safety. Each Party will perform work on its side of the Point of Ownership as if its facilities are energized or test for voltage and install grounds prior to beginning work.
- (iv) Each Party shall be responsible for returning its facilities to approved operating conditions, including removal of grounds, prior to the Company authorizing the restoration of parallel operation.
- (v) The Company shall install one or more red tags similar to the red tag shown in Exhibit B-2 attached hereto and made a part hereof, on all open switches.

  Only Company personnel on the Company's switching and tagging list shall remove and/or close any switch bearing a Company red tag under any circumstances.
- 3.10 Should any essential protective equipment fail or be removed from service for maintenance or construction requirements, the Facility's electric generation equipment shall be disconnected from the Company's system. To accomplish this disconnection, the QF shall either (i) open the generator breaker number(s) \_\_\_\_\_; or (ii) open the manual disconnect switch number(s) \_\_\_\_\_.

3.10.1 If the QF elects option (i), the breaker assembly shall be opened and drawn out by QF personnel. As promptly as practicable, Company personnel shall install a Company padlock and a red tag on the breaker enclosure door.

3.10.2 If the QF elects option (ii), the switch shall be opened by QF personnel or by Company personnel and, as promptly as practicable, Company personnel will install a Company padlock and a red tag.

### 4.0 <u>Inspection and Testing</u>

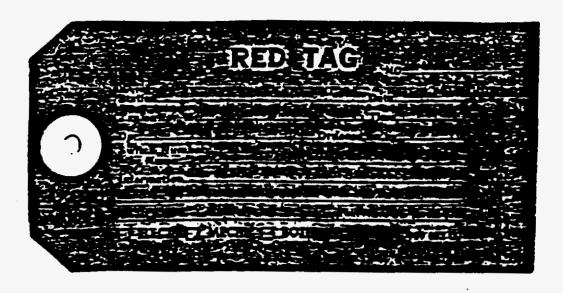
- 4.1 The inspection and testing of all electrical relays governing the operation of the generator's circuit breaker shall be performed in accordance with manufacturer's recommendations, but in no case less than once every 12 months. This inspection and testing shall include, but not be limited to, the following:
  - (i) electrical checks on all relays and verification of settings electrically;
  - (ii) cleaning of all contacts;
  - (iii) complete testing of tripping mechanisms for correct operating sequence and proper time intervals; and
  - (iv) visual inspection of the general condition of the relays.
- 4.2 In the event that any essential relay or protective equipment is found to be inoperative or in need of repair, the QF shall notify the Company of the problem and cease parallel operation of the generator until repairs or replacements have been

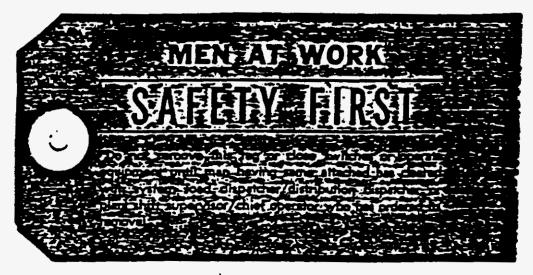
made. The QF shall be responsible for maintaining records of all inspections and repairs and shall make said records available to the Company upon request.				
4.3 The Company shall have the right to operate and test any of the Facility's protective equipment to assure accuracy and proper operation. This testing shall not relieve the QF of the responsibility to assure proper operation of its equipment and to perform routine maintenance and testing.				
5.0 Notification				
5.1 Communications made for emergency or operational reasons may be made to the following persons and shall thereafter be confirmed promptly in writing:				
To The Company: System Dispatcher on Duty Title: System Dispatcher Telephone: (813)866-5888 Telecopier: (813)384-7865				
To The QF: Name Title: Telephone: Telecopier:				
5.2 Each Party shall provide as much notification as practicable to the other Party regarding planned outages of equipment that may affect the other Party's operation.				

Exhibit B-1 will be unique for each QF and must be completed prior to parallel operation of the Facility with the Company.

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A switch or switch point (i.e., elbow, open jumpers, etc.) with a red tag attached is open and shall not be closed under any circumstances. After a switch has been red tagged, that switch cannot be closed until the red tag is removed. Red tags can only be removed when authorized by a specific written order.





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SCHEDULE	5	Capacity Payment Adjustment for On-Peak Capacity Factor
SCHEDULE	6	Performance Adjustment
\$CHEDULE	7	Charges to Qualifying Facility
SCHEMII E	g	Delivery Voltage Adjustment

### SCHEDULE 1

SEMERAL INFORMATION FOR 1991 COMBUSTION TURBINE UNIT

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GENERAL

YEAR OF AVOIDED UNIT = 1991 AVOIDED UNIT PREFERENCE PLANT = BARTOW CT UNITS

### Ful

OPERATING DATA

AVOIDED UNIT VARIABLE ORM COSTS IN 1/90 \$'s = \$1.74/MUH
SYSTEM VARIABLE ORM COSTS IN 1/90 \$'s = \$0.592/MUH
ANNUAL ESCALATION RATE OF ORM COSTS = 5.10X
MINIMUM ON-PEAK CAPACITY FACTOR = 90.0X
AVOIDED UNIT HEAT RATE = 12,480 BTU/KVH
TYPE OF FUEL = DISTILLATE

ON-PEAK HOURS

(1) FOR THE CALENDAR MONTHS OF MOVEMBER THROUGH MARCH,
ALL DAYS: 6:00 A.M. TO 12:00 MOON, AND
5:00 P.M. TO 10:00 P.M.

(2) FOR THE CALENDAR MONTHS OF APRIL THROUGH OCTOBER, ALL DAYS: 11:00 A.M. TO 10:00 P.M.

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#### SCHEDULE 2

Payments for Avoided 1991 Combustion Turbine Unit

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Fuel Multiplier \* 1.0

(1)	(2)		(3)			(4)	(5)	(6)
(1)						ENERGY PAY	MENT - S	/HUH (E)
	CAPACITY	PAYMENT - \$/KW/N	DAYNENT	DATE	<del>, , , (</del> ) )	EACHOT THE	(ESTIMATED	)
CALENDAR	NORMAL PAYMENT RATE	ACCELERATE	PATRENI	KAIE	<del>/ / /</del> /	FUEL	08H	TOTAL
YEAR						<u> </u>	<del></del>	
	3.96					29.78	0.76	30.54
1991	3.70 4.17					31.62	0.80	32.42
1992	4.37					34.28	0.84	35.12
1993	4.54					39.75	0.88	40.63
1994						44.64	0.93	45.57
1995	4.44 sant					47,98	0.98	48.96
1996	5.08					52.63	1.03	53.66
1997	<u> </u>					\$5.82	1.08	56.90
1998	5.61					\$3,70	1.13	54.83
1999	5.90					\$8.78	1.19	59.97
2000	6.20					56.42	1.25	57.67
2001	6.51					62.36	1.32	63.68
2002	6.84					66.46	1.38	67.84
2003	7-19					72.25	1.45	73.70
2004	7.56					79.70	1.53	81.23
2005	<del>2.95</del> 7.9 Y					83.76	1.61	85.37
2006	<del>2.3</del> 5 \$.3 6					88.04	1.69	89.73
2007	S-72 8.77					92.53	1.77	94.30
2008	9.22					97.25	1.86	99.11
2009	ى9.7 <del>0 مى</del> ھ				•		1.96	104.16
2010	10.19					102.20		109.48
2011	10.71					107.42	2.06	115.06
2012	11.25					112.90	2.16	
2013	11.83					118.65	2.27	120.92
2014	12.43					124.70	2.39	127.09
2015	13.07					131.06	2.51	133.57
2016	13.73					137.75	2.64	140.39
2017	14.43					144.77	2.78	147.55
2018	15.17					152.16	2.92	155.08
2019	15.94					159.92	3.07	162.99
2020	16.76					168.07	3.22	171.29
202/	17.61					14.61	3.37	150.00
LOLL	18.51					18545	3.5%	189.4
NOTES:	1023 M.46 (L)					145.12	2.74	M8.76
-> ()	1						or love	oresent va

The GF may structure an accelerated payment rate schedule that has the same net present value over the Term as the normal payment rate schedule using the discount rate specified in section 8.5.2 hereof and which assumes the Contract In-Service Date specified as of the Execution Date. If the Contract In-Service Date differs from the date specified as of the Execution Date, the accelerated payment rate schedule in this schedule will be recaiculated so that the recaiculated ratio of the of the recalculated belable to

(information provided is estimated and excludes the Delivery Voltage Adjustment.

pursent to Article ITL (a) If the Term of the Agreement feetended beyond 2023, the normal payment rate referble shall be excelated at 5.17. per year.

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SCHEDULE 3 GENERAL INFORMATION FOR 1991 PULYERIZED COAL UNIT

Page 1 of 1

GENERAL YEAR OF AVOIDED UNIT = 1991 AVOIDED UNITY REFERENCE PLANT = CRYSTAL RIVER UNITS 182 Fuel

OPERATING DATA AVOIDED UNIT VARIABLE ORM COSTS IN 1/90 S's = \$4.36/MWH (Option A only) ANNUAL ESCALATION RATE OF OLM COSTS = 5.10% ANNUAL ESLABATION
HINIMAM ON-PEAK CAPACITY FACTOR = 83.UA
AVOIDED UNIT HEAT RATE = 9,830 BTU/KUH

TYPE OF FUEL = COAL with 1.150/0 Sulfan by weight maximum at

11,000 BTU/16., adjustable in duret proportion to the BTU/16.

ON-PEAK HOURS ALL DAYS: 6:00 A.M. TO 12:00 NOON, AND 5:00 P.M. TO 10:00 P.M.

(Z) FOR THE CALENDAR MONTHS OF APRIL THROUGH OCTOBER, ALL DAYS: 11:00 A.M. TO 10:00 P.M.

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#### SCHEDULE 4

Payments for Avoided 1991 Pulverized Coal Unit

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### Option A

### Fuel Multiplier = 1.0

(1)	(2)	(3)	(4)	(5)	(6) (C.)
(1)	•	e (m) (mouth (b)	ENERGY PA	YMENT -	
		ACCELERATED PAYMENT RATE (2)		(ESTIMATE	
CALENDAR	NORMAL PAYMENT RATE	ACCELERATED TATION	FUEL	M30	TOTAL
YEAR				_	
	10.92		21.07	4.70	25.77
1991	11,48		21.94	4.94	26.88
1992	12.06- 12.07		22.86	5.19	28.05
1993	12.68		23.87	5.45	29.32
1994	13.32		25.09	5.73	30.82
1995	14.00	•	26.37	6.02	32.39
1996	14,72		27.71	6.33	34.04
1997	15.46		29.13	6.65	35.78
1998	15.26-16.25		30.61	6.99	37.60
1999	17.08		32.17	7.35	39.52
2000	17.96- 17.45		33.81	7.73	41.54
2001	18.87		35.54	8.12	43.66
2002	19.83		37.35	8.53	45.88
2003			39.26	8.97	48.23
2004	20.85		41.26	9.43	\$0.69
2005	21.91 <del>23.03</del> 23.02		43.36	9.91	\$3.27
2006			45.57	10.41	55.98
2007	24.20		47.90	10.94	58.84
2008	25.43		50.34	11.50	61.84
2009	26.73 26.74		52.91	12.09	65.00
2010	28.09		55.61	12.70	68.31
2011	29.53		58.44	13.35	71.79
2012	31.0531.04		61.42	14.03	75.45
2013	32.6232.61		64.55	14.75	79.30
2014	34.28		67.85	15.50	<b>83.3</b> 5
2015	36.03		71.31	16.29	87,60
2016	<del>-27.67</del> 57.86		74.94	17.12	92.06
2017	39.80		78.77	18.00	96.77
2018	<del>41.83</del> 4/\$2		82.78	18,91	101.69
2019	43.96		87.01	19.88	106.89
2020	46.20	<u>-</u>	91.45	20,84	
204	48.56		-	21.96	
2022	51.03		96.11		
223	53.64		101-11	23.08	
NOTES:	-				, ,

The QF may structure an accelerated payment rate schedule that has the same net present value over the Term as the normal payment rate schedule using the discount rate schedule. over the Term as the normal payment rate schedule using the discount rate specified in section 8.5.2 hereof and which assumes the Contract In-Service Date specified as of the Execution Date. If the Contract In-Service Date differs from the date specified as of the Execution Date, the accelerated payment rate schedule in this schedule will be recalculated so that the secsiculated cohedule has the same net present value, so the normal payment schedule over the Termy is unchanged to provide the present value, so the normal payment schedule over the Termy is unchanged to provide the present payment schedule over the Termy is unchanged.

(C) Information provided is estimated and excludes the Delivery Voltage Adjustment.

A Section Control of the Control of

(a) of the Term of the Agreement is extended beyond 2023 pursuant to Article II hereof, the normals payment rate scholuce shall be escalated at 5.120 per year.

Docket 95-0110-El

RALPH KILLIAN

RK-4 Exhibit No.

Sheet 68 of 79

#### SCHEDULE 4

Payments for Avoided 1991 Pulverized Coal Unit

Page 2 of 3

### Option 8

### Fuel Multiplier = 1.0

(1)	(2)	(3)	(°)
, .	PAPACITY	PAYMENT - S/KW/MONTH (b)	) ENERGY PAYMENT - \$/MWH CM
	NORMAL PAYMENT RATE	ACCELERATED PAYMENT RATE CAT	(ESTIMATED)
CALENDAR YEAR	NO. Sec. 1. Se	•	FUEL
	47 -		21.07
1991	13.77		21.94
1992	14.47		22.86
1993	15.21		23.87
1994	15.98		25.09
1995	16.80		26.37
1996	17.65	•	27.71
1997	18.55		29,13
1998	<del>19.50</del> 19.49		30.61
1999	20.49		
2000	21.54		32.17
2001	<del>22.64-</del> 22.63		33.81
2002	23.79		35.54
2003	25.00		37.35
2003	26.28		39.26
2005	27.62		41.26
2005	29.85 29.02		43.36
	30.51		45.57
2007	32.07		47.90
2008	33.70 33.71		50.34
2009			\$2.91
2010	35.42		55.61
2011	37.23		\$8.44
2012	39.13		61.42
2013	12.42 41.11		64.55
2014	43.22		67.85
2015	45.42		71.31
2016	47.73		
2017	50.17		74.94
2018	52. <i>7</i> 3		78.77
2019	55.42		82.78
2020	58.25		87.01
2024	61,22	-	91.45
2022	44.33		96,11
2013	67.62-(a)		
NOTES:	61.6		101.01

The GF may structure an accelerated payment rate schedule that has the same net present value over the Term as the normal payment rate schedule using the discount rate specified in section over the Term as the normal payment rate schedule using the discount rate specified in section Date. If the Contract In-Service Date differs from the date specified as of the Execution Date, the accelerated payment rate schedule in this schedule will be recalculated so that the recalculated so the recalculated so that the recalculated so the recalculated so that the recalculated so the re 8.5.2 hereof and which assumes the Contract In-Service Date specified as of the Execution of the recolculated schoolale to ratio of the

Information provided is estimated and excludes the Delivery Voltage Adjustment.

(a) If the Term of the Agreement extended beyond 2023 present to Arhèle II herevy, the normal payment rate totabelle shall be escalated at 5.1% per year. Docker 95-0110-EI

**RALPH KILLIAN** 

Exhibit No.

RK-4

Sheet 69 of 79

### SCHEDULE 4

Payments for Avoided 1991 Pulverized Coal Unit

Page 3 of 3

141

### Option C

### Fuel Multiplier = 0.8

(1)	(2)		(4)		
(1)		THENT - \$/KW/MONTH (5)	(C) ENERGY PAYMENT - S/MWH (LE)		
_	CAPACITY PA	YMENT - S/KW/MONTH (5) ACCELERATED PAYMENT RATE (8)	(ESTIMATED)		
CALENDAR	NORMAL PAYMENT RATE	ACCECERATED TATIONAL ACCES			
YEAR					
	16.37		16.86		
1991	17.18		17.55		
1992	18.04		18.29		
1993	18.93		19.10		
1994	19.90		20.07		
1995	20.91		21.10		
1996			22.17		
1997	21.98 <del>23.10</del>		23.30		
1998			24.49		
1999	24.27		25.74		
2000	25.52		27.05		
2001	26-42 2 4,81		28.43		
2002	28.18		29.88		
2003	29.62		31.41		
2004	31.13		33.01		
2005	32.72		34.69		
2006	34.39 34.38		36.46		
2007	36.14		38.32		
2008	37.99		40.27		
2009	<del>39.92</del> 39.93		42.33		
2010	41.96		44.49		
2011	44.10		46.75		
2012	46.35		· - · · ·		
2013	4 <del>8.71</del> 48.70		49.14		
2014	51.20		51.64		
2015	53.81		54.28		
2016	56.55 56.54		57.05		
2017	59.43		59.95		
2018	62.47		63.02		
2019	65.65		66.22		
2020	-69.00		69.61		
<b>2024</b>	72.52		73./6		
2022	16.21		76.89		
2123	80.11 (4)		70.71		
NOTES:	,		•		

The QF may structure an accelerated payment rate schedule that has the same, net present value over the Term as the normal payment rate schedule using the discount rate specified in section 8.5.2 hereof and which assumes the Contract In-Service Date specified as of the Execution Date. If the Contract In-Service Date differs from the date specified as of the Execution Date, the accelerated payment rate schedule in this schedule will be recalculated so the mecalculated schedule has the case net present value as the normal payment schedule over the Termis unchanged

(C)

ratio of the schedule to

(B) Information provided is estimated and excludes the Delivery Voltage Adjustment.

(a) If the Term of the Agreement, extended beginned 2023 pursuant to Article II heroy, the normal pregnant rate reledule shall be encluted at 5.190 peryear. Docket 95-0110-EI

RALPH KILLIAN

Exhibit No. RK-4 Sheet 70 of 79

SCHEDULE 5
Capacity Payment Adjustment for On-Peak Capacity Factor

Page 1 of 1

ACTUAL O.P.C.F.	ADJUSTMENT HULTIPLYING FACTOR		
Greater than or Equal to the Committed O.P.C.F.	1.0		
From 50.0% to the Committed O.P.C.F.	O.P.C.F.  Committed O.P.C.F.		

Below 50.0%

0

MOTE: O.P.C.F. = On-Peak Capacity Factor

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Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-4
Sheet 71 of 79

### SCHEDULE 6 Performance Adjustment

Page 1 of 1

The Performance Adjustment provision of Article IX in this Agreement shall be calculated as follows each month after the Contract In-Service date:

 $\sum$  PERADJ; = (CC x 1.0 hr. x CF/100)] x (EP1; - EP2;) for i = first bone

### Where:

PERADJ; = the Performance Adjustment for hour i.

TIME at the hourly energy delivered to the Company by the OF during hour i.

cc = the Committed Capacity in KW.

EP9; - the As-Available Energy Cost in \$/KWH for hour i.

EP2 \* the firm Energy Cost in S/KWH for hour i.

### Note:

The Performance Adjustment shall not apply to any hour in which the following condition occurs:

- (a) the energy payment is determined on the basis of the of As-Available Energy Cost;
- (b) the Company cannot perform its obligation to receive all energy which the QF has made available for sale at the point of delivery;
- (c) the firm Energy Cost exceeds the As-Available Energy Cost.

SCHEDULE 7 Charges to Qualifying Facility

Page 1 of 1

### Customer Charges:

The Qualifying Facility shell be billed monthly for the costs of meter reading, billing, and other appropriate administrative costs. The charge shall be set equal to the stated Customer Charge of the Company's applicable rate schedule for service to the Qualifying Facility load as a non-generating customer of the Company.

### Operation, Maintenance, and Repair Changes:

The Qualifying Facility shall be billed monthly for the costs associated with the operation, maintenance, and repair of the interconnection. These include (a) the Company's inspections of the interconnection and (b) maintenance of any equipment beyond that which would be required to provide normal electric service to the Qualifying Facility if no sales to the Company were involved.

In lieu of payments for actual charges, the Qualifying Facility shall pay a nonthly charge equal to 0.50% of the installed content the Interconnection swittens. Costs less the Interconnection Costs offset. This monthly nate shall be adjusted periodically to the power nate applicable to slandard offset contracts pursuant to the rules in Appendix 5.

# APPENDIX C RATES FOR PURCHASE OF FIRM CAPACITY AND EMERGY FROM A QUALIFYING FACILITY

SCHEDULE 8
Delivery Voltage Adjustment

Page 1 of 1

The GF's energy payment will be multiplied by a 'Delivery Voltage Adjustment whose value will depend upon (i) the delivery voltage at the Point of Delivery and (ii) the methodology approved by the FPSC to determine the adjustment for standard offer contracts pursuant to the rules in Appendix E.

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RALPH KILLIAN
Exhibit No. RK-4
Sheet 74 of 79

#### APPENDIX D

#### TRANSMISSION SERVICE STANDARDS

#### 1.0 Purpose.

This appendix provides minimum standards required by the Company in the Transmission Service Agreement and applies to QF's whose Facility is not directly interconnected with the Company and who are selling firm capacity and energy to the Company.

#### 2.0 Standards for QF's Selling Firm Capacity and Energy.

- 2.1 The QF shall ensure that, throughout the Term of the Agreement, the Transmission Service Utility or its lawful successors but no other party shall deliver the Committed Capacity and electric energy to the Company on behalf of the QF.
- 2.2 A proposed Transmission Service Agreement and any amendments thereto shall be submitted to the Company for its review and consent no less than sixty (60) days before said Transmission Service Agreement or amendment is proposed to be tendered for filing with the FERC. Such consent shall not be unreasonably withheld. No review, recommendations or consent by the Company shall be deemed an approval of any safety or other arrangements between the QF and the Transmission Service Utility nor shall it relieve the QF and the Transmission Service Utility of their responsibility with respect to the adequate engineering, design, construction and operation of any facilities other than the Company's Interconnection Facilities and for any injury to property or persons associated with any failure to perform in a proper and safe manner for any reason. Nothing contained herein shall prevent the Company from exercising any rights that it

otherwise would have to participate as a full party before the FERC when the Transmission Service Agreement or amendments thereto is tendered for filing.

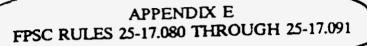
- 2.3 To ensure the continuous availability to the Company of the Committed Capacity during the Term of the Agreement, the Transmission Service Agreement shall contain provisions satisfying the following minimum criteria:
  - (i) the Transmission Service Utility's transmission commitment shall be for the full amount of the Committed Capacity plus any losses assessed by the Transmission Service Utility from the Point of Metering to the Point of Delivery;
  - (ii) the duration of the Transmission Service Utility's transmission commitment shall be for a term at least as long as the Term of the Agreement with termination provisions that are acceptable to the Company;
  - (iii) the Transmission Service Utility's transmission commitment shall not be interruptible or curtailable to a greater extent than the Transmission Service Utility's transmission service to its own firm requirements customers;
  - (iv) The QF and the Transmission Service Utility shall not be permitted to amend the Transmission Service Agreement in a manner that adversely affects the Company's rights without the Company's prior written consent;
  - (v) the Company shall be provided with prompt notification of any default under the Transmission Service Agreement;

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Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-4
Sheet 76 of 79

- (vi) the QF and/or the Transmission Service Utility shall expressly indemnify and hold the Company harmless for any and all liability or cost responsibility in connection with the Transmission Service Agreement and the activities undertaken thereunder, including, without limitation, any facility costs, service charges, or third party impact claims:
- (vii) the Company shall be entitled to reasonable access at all times to property and equipment owned or controlled by either the QF or the Transmission Service Utility and at reasonable times to records and schedules maintained by either the QF or the Transmission Service Utility, in order to carry out the purposes of the Agreement in a safe, reliable and economical manner;
  - (viii) unless otherwise agreed by the Company, the Point of Delivery into the Company's system shall be defined as all points of interconnection at transmission voltages between the Company and the Transmission Service Utility pursuant to any tariffs or interchange agreements on file with the FERC and in effect from time to time;
  - to the Company shall be telemetered to the Company and shall be reduced for all losses assessed by the Transmission Service Agreement from the Point of Metering to the Point of Delivery; the electric energy as so adjusted shall be considered the electric energy delivered to the Company for billing purposes and shall be considered as if within the Company's Control Area, provided that the Transmission Service Utility can deliver and the Company accept the electric energy as so adjusted;

- (x) As an alternative to section 2.3(ix) hereof, electric energy from the Facility shall be scheduled for delivery to the Point of Delivery by the Transmission Service Utility and such electric energy as is scheduled shall be considered as electric energy delivered to the Company for billing purposes.
- (xi) The Transmission Service Utility and the Company shall coordinate with one another concerning any inability to deliver or receive the electric energy as adjusted pursuant to section 8.3 (ix) hereof. Whenever the Transmission Service Utility is unable to deliver or the Company does not accept such energy, such energy shall no longer be considered within the Company's Control Area if energy is delivered pursuant to section 2.3(ix) hereof; and
- (xii) a contact person for the Transmission Service Utility shall be designated for day-to-day communications between the Transmission Service Utility and the Parties.



(A current copy of the rules will be included heroin when published.)

FPSC DOCKET NO. 950110-EI EXHIBIT NO. \_\_\_\_RK-5

FPSC DOCKET NO. 950110-EI EXHIBIT NO. \_\_\_\_RK-6

#### QUARTERLY PROGRESS REPORT PANDA-KATHLEEN COGENERATION FACILITY JUNE 1994

#### I. DEVELOPMENT ACTIVITIES

#### A. Regulatory Activities

- 1. The PSD (Air) Permit was submitted on June 3, to the Florida Department of Environmental Protection (FDEP). Two (2) combined cycle configurations were submitted for review. One configuration consists of a nominal 75 MW General Electric (GE) 7EA Combustion Turbine, one (1) HRSG, and one (1) nominal 40 MW steam turbine for a combined output of 115 MW. The other configuration consists of one (1) ABB Power Generation (ABB) 11N1 Combustion Turbine, one (1) HRSG and one (1) steam turbine in a single shaft arrangement rated at 115 MW nominal. Both CT's will be designed with dry low NO, combustors.
- 2. The Water Use Permit was submitted on June 3, to the Southwest Florida Water Management District (SWFWMD).
- 3. The draft copies of the Wastewater and the Stormwater permits are under review. Submittal is projected to be June 24 and June 30, respectively.

#### B. Contracts

- 1. Bids were received in May from three EPC contractors. Bids are still being evaluated. A decision regarding the EPC contractor should be reached by the end of June.
- 2. Discussions are continuing with the City of Lakeland regarding electrical interconnection and wheeling rates and the supply of raw water.

Docket 95-0110-EI

RALPH KILLIAN

Exhibit No. RK-6

Sheet 1 of 2

#### II. CONSTRUCTION

No activity.

#### III. START-UP AND TESTING

No activity.

### IV. OPERATIONS AND MAINTENANCE

No activity.

Docket 95-0110-El
RALPH KILLIAN
Exhibit No. RK-6
Sheet 2 of 2

FPSC DOCKET NO. 950110-EI EXHIBIT NO. \_\_\_\_RK-7

#### PANDA-KATHLEEN L.P.

A Panda Company -



RK-7

of 1

Sheet 1

June 23, 1994

Mr. David Gammon, P.E. Senior Cogeneration Engineer Florida Power Corporation 3201 34th Street South St. Petersburg, FL 33711

Dear David:

Yours truly,

As we discussed in our meeting on June 22, 1994, Panda-Kathleen, L.P. is permitting two equipment configurations- a GE 7EA and an ABBIIN for its Lakeland project. These machines are the most economical units that allow Panda-Kathleen, L.P. to supply the committed capacity of 74.9 MW at all times. The net output of the selected turbine will be 100-115 MW under certain conditions.

A prospective lender has raised the question as to the price that Panda-Kathleen, L.P. would be paid for power in excess of 74.9 MW. The contract provides for payment of the as-available energy prices at times when the avoided unit would not have otherwise run. When the avoided unit would have run, two options exist. FPC would pay either (1) the as-available energy rate or (2) the avoided unit rate. FPC agrees that Panda-Kathleen L.P. shall be paid the "avoided unit rate" under the contract for all energy above 74.9MW during times when the "avoided unit" would have been dispatched, since Panda-Kathleen, L.P. did not elect the "Performance Adjustment" specified in Section 9.1.3 of the contract.

In order to clarify this question and maintain our development schedule, please signify your concurrence on this interpretation in the space provided below on or before July 8, 1994.

Ted Hollon
Vice President
Project Management and Construction

Accepted and Agreed to as of \_\_\_\_\_\_, 1994

FLORIDA POWER CORPORATION

By:\_\_\_\_\_\_\_

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. R

Title:\_\_\_\_\_

FPSC DOCKET NO. 950110-EI EXHIBIT NO. RK-8

#### PANDA-KATHLEEN L.P.

A Panda Company



July 27, 1994

Mr. David Gammon, P.E.
 Senior Cogeneration Engineer
 Florida Power Corporation
 3201 34th Street South
 St. Petersburg, FL 33711

Re: Standard Offer Contract For The Purchase Of Firm Capacity And Energy From A Qualifying Facility Less Than 75 MW Or A Solid Waste Facility Between Panda-Kathleen, L.P. and Florida Power Corporation

#### Dear David:

As we discussed in our meeting on June 22, 1994, Panda-Kathleen, L.P. is permitting two equipment configurations, a GE Frame 7EA and an ABB II N for the Lakeland cogeneration facility. These two gas turbines are the most environmentally attractive and technically feasible for supplying FPC 74.9 MW of capacity at all times, under all operating and site conditions, as we are obligated to do. The net output of the selected configuration may reach 115 MW under certain operating and site conditions. FPC will not be obligated to pay capacity payments above the committed capacity of 74.9 MW.

The referenced contract provides for payment of as-available energy prices at times when the avoided unit would not have otherwise run. When the avoided unit would have run, FPC agrees that Panda-Kathleen L.P. will be paid the "avoided unit rate" under the contract for all energy delivered to FPC above 74.9 MW during times when the "avoided unit" would have been dispatched.

Please confirm that the foregoing accurately reflects your understanding of the above referenced contract by signing in the space provided below and returning a signed counterpart. In order that Panda-Kathleen, L.P. maintain its project development schedule, I would very much appreciate your prompt response. Panda-Kathleen, L.P. has no objection to submitting this letter to the PSC if it is deemed necessary by FPC.

Docket 95-0110-El
RALPH KILLIAN
Exhibit No. RK-8
Sheet 1 of 2

<del>-</del>	Mr. David Gammon, P.E. July 27, 1994 Page 2	
•	Sincerely,	
- - -	Ted Hollon Vice President Project Management and Construction cc: Jim Fama	Em .
		Accepted and Agreed to as of, 1994
		FLORIDA POWER CORPORATION
_		By:
-		Title:

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-8
Sheet 2 of 2

FPSC DOCKET NO. 950110-EI EXHIBIT NO. \_\_\_\_RK-9

. 1 **-** 5 mm.



August 3, 1994

Mr. Ted Hollon
Vice President, Project Management and Construction
Panda-Kathleen L.P.
4100 Spring Valley, Suite 1001
Dallas, Texas 75244

Re: Standard Offer Contract for the Purchase of Firm Capacity and Energy from a Qualifying Facility Less Than 75 MW or a Solid Waste Facility between Panda-Kathleen, L.P. and Florida Power Corporation

#### Dear Ted:

This is in response to your letter of July 27, 1994. You have requested that I sign that letter if it "accurately reflects [my] understanding" of the above referenced contract. Since your letter does not reflect my understanding of that contract, I cannot and, therefore have not, signed it.

First, the letter recites that the output of Panda's facility "may reach 115 MW." I understand that you believe Panda may construct such a facility consistent with the Standard Offer contract between our companies. However, as you know, we are not in agreement with that position. In fact, the Standard Offer Contract specifically states that it is for the purchase of capacity and energy by Florida Power "from a Qualifying Facility less than 75 MW." (emphasis added)

Second, the letter uses language so broad (e.g., "at all times, under all operating and site conditions"), that I could not sign the letter under any circumstances. To agree to such language would suggest that I am capable of anticipating all possible scenarios that might be encompassed within such language. I am not so fortunate. Moreover, I can envision possible scenarios with which I would not agree. For example, the letter might be read to suggest that Florida Power is, "at all times, under all operating and site conditions," required to accept 74.9 MW of energy - or even more. As I'm sure you understand, that is not Florida Power's reading of the contract at all. We believe there are situations in which, consistent with the contract, Florida Power may refuse to accept even 74.9 MW or energy -- let alone more.

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-9
Sheet 1 of 2

Third, to the extent, if any, that Florida Power would decide to accept energy above 74.9 MW, we disagree that, in some instances, it would pay "avoided unit" prices for that energy. Simply stated, if Florida Power decided to accept energy above 74.9 MW, it would only pay "as available" energy prices, not "avoided unit" prices. Thus, we disagree with the contrary language of your letter.

Please understand that my refusal to sign your letter does not mean that Florida Power does not intend to abide by its contractual obligations. Rather, to the exact contrary, I cannot sign your letter for the very reason that it appears to alter those obligations.

If you have any questions, please give me a call at (813)866-4697.

Sincerely,

David Gammon

Senior Cogeneration Engineer

DWG/mag

cc: R. D. Dolan

J. B. Hines

DWG#4:Hollos.hr

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-9
Sheet 2 of 2

FPSC DOCKET NO. 950110-EI EXHIBIT NO. RK-10

#### PANDA-KATHLEEN L.P.

A Panda Company



August 8, 1994

Mr. Robert D. Dolan, P. E. Manager, Cogeneration Contracts Florida Power Corporation 3201 34th Street South St. Petersburg, FL 33711 Docket 95-0110-EI

RALPH KILLIAN

Exhibit No. RK-10

Sheet 1 of 3

RE: Standard Offer Contract For The Purchase Of Firm Capacity And Energy
From A Qualifying Facility Less Than 75 MW Or A Solid Waste Facility
Between Panda-Kathleen L. P. and Florida Power Corporation (the "Agreement")

Dear Mr. Dolan:

The purpose of this letter is to clarify issues relating to the Agreement. Panda is installing either a GE Frame 7EA or an ABB 11 N for the Lakeland cogeneration facility since they are the only gas turbines commercially available which can produce at least 74.9 MW each day over the life of the 30 year contract term, taking into account degradation and site weather conditions. The cogeneration facility may produce more than 74.9 MW of energy from time to time depending on the degree of site weather conditions and the effects of performance degradation.

Panda will submit this letter to the Florida Public Service Commission (FPSC) to determine whether or not FPSC approval is required with respect to Panda's intention to install such equipment.

Florida Power Corporation (FPC) and Panda-Kathleen L.P. (Panda ) agree as follows:

1. Nothing in this letter shall prevent or preclude FPC from taking any position in or intervening in any such proceeding before the FPSC.

Assuming that the FPSC determines that its approval is not required, then the terms of the Agreement shall apply to such Facility including but not limited to 2, 3, and 4 below.

- 2. Under no circumstances is FPC required to pay for more than 74.9 MW of capacity.
- 3. FPC will purchase the energy produced above 74.9 MW, if any, at all times when available except when system operating conditions will not permit such; i.e. at minimum load conditions as reasonably defined by FPC.

4. FPC will pay Panda for energy produced above 74.9 MW at FPC's as-available energy price.

Subject to any determination of the FPSC, this letter does not in any way modify, amend or otherwise change the Agreement. In the event of any conflict between the Agreement and this letter, the Agreement shall prevail.

The parties acknowledge this clarification by signature below.

PANDA-KATHLEEN L. P.

By: Panda-Kathleen Corporation

By: Ralph T. Kill

Title: Sener Vice President

Date: Lugget 8, 1494

Accepted and Agreed to as of August \_\_\_\_\_\_, 1994

FLORIDA POWER CORPORATION

Docket 95-0110-EI
RALPH KILLIAN
Exhibit No. RK-10

Sheet 2 of 3

Title:



August 8, 1994

Mr. David Gammon, P. E. Senior Cogeneration Engineer Florida Power Corporation 3201 34th Street South St. Petersburg, Florida 33711

RE: Standard Offer Contract For the Purchase Of Firm Capacity and Energy From A Qualifying Facility Less Than 75 MW Or A Solid Waste Facility Between Panda-Kathleen L.P. and Florida Power Corporation (the "Agreement").

Dear David:

Please find attached a letter of clarification reflecting the changes per our recent discussion. Panda has signed the letter. Please fax a copy of the letter to us upon FPC's execution thereof.

Thank you for your cooperation.

Raph T. Will

Sincerely,

Ralph T. Killian

Senior Vice President

RTK/lc

enclosure

Docket 95-0110-El

Exhibit No.

RK-10

Sheet 3 of 3

FPSC DOCKET NO. 950110-EI
EXHIBIT NO. \_\_\_\_RK-11

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. . .

### PANDA-KATHLEEN L.P.

A Panda Company



August 10, 1994

Mr. Robert D. Dolan, P. E. Manager, Cogeneration Contracts Florida Power Corporation 3201 34th Street South St. Petersburg, FL 33711

RE: Standard Offer Contract For The Purchase Of Firm Capacity And Energy
From A Qualifying Facility Less Than 75 MW Or A Solid Waste Facility
Between Panda-Kathleen L. P. and Florida Power Corporation

Dear Mr. Dolan:

The purpose of this letter is to advise Florida Power Corporation (FPC) of Panda's intention to install either a GE Frame 7EA or an ABB 11 N1 combustion turbine in a combined cycle configuration for the Lakeland cogeneration Qualifying Facility since they are the only gas turbines commercially available which can produce at least 74.9 MW each day over the life of the 30 year contract term, taking into account equipment degradation, site weather conditions, steam host needs, and environmental requirements. Panda plans to discuss equipment configuration with the Florida Public Service Commission (FPSC) to determine whether or not FPSC approval is required.

Assuming that the FPSC determines that its approval for such equipment configuration is not required, then it is Panda's understanding that the following shall apply:

- In the event that any energy is produced in excess of 74.9 MW, FPC will pay Panda for energy produced above 74.9 MW at FPC's as-available energy price.
- 2. FPC will purchase the energy produced above 74.9 MW, if any, at all times when available except when system operating conditions will not permit such; i.e. at minimum load conditions as reasonably defined by FPC.

Sincerely,

Kyle Woodruff
Project Manager

Docket 95-0110-El

Exhibit No.

RK-11

Sheet 1 of 1

4100 Spring Valley, Suite 1001 · Dallas, Texas · 75244 · 214/980-7159 · Pax 980-6815

EXHIBIT

-8-

139430

FPSC DOCKET NO. 950110-EI
EXHIBIT NO. \_\_\_\_RK-12

#### JOHNSON AND ASSOCIATES ATTORNEYS AND COUNSELORS

SARRETT G. JOHNSON

KARA TOLLETT OAKLEY

315 SOUTH CALHOUN ST., SUITE 350 TALLAHASSEE FL 32301 (904) 222-2623

MAILING ADDRESS: P.O. BOX 1308 TALLAHASSEE, FLORIDA 32302 FAX (904) 222-2702

August 23, 1994

Joseph D. Jenkins Director, Electric & Gas Division Florida Public Service Commission 101 East Gaines Street Tallahassee, Florida 32399

Dear Joe:

The purpose of this letter is to confirm the discussion on August 15, 1994 between you, Bob Trapp and Tom Ballenger of your staff and Bill Nordlund, Brian Dietz and myself regarding the Panda Kathleen cogeneration plant and Panda's standard offer contract with Florida Power Corporation.

As we discussed, Panda's contractual obligation is to be able to produce 74.9 MW under all site conditions for the life of the unit. Panda recently informed FPC by letter of the equipment configurations which will enable Panda to meet its contractual obligation while complying with its various environmental requirements. A copy is attached for your information. We also discussed the fact that under certain site conditions the ABB 11 N I and GE Frame TEA will produce more than 74.9 MW. Since Panda Kathleen's contractual requirement is to be able to produce 74.9 MW under worst case conditions, such as right before a major overhaul and during a heat wave, it is necessarily true that the unit be capable of more than 74.9 MW under best case conditions. As we discussed, under optimal conditions these units can produce in the 115 MW range. Of course, this energy is quite a bargain for the rate payers since it carries no capacity costs to FPC under the Standard Offer Contract.

We also discussed the fact that the operation of Panda-Kathleen in the manner described in this letter and the attached letter to FPC is consistent with Panda's standard offer contract and is not a contract change that would require Florida Public Service Commission approval. Please advise immediately if this is incorrect or if you have any questions.

Barrett G. Johnson

Sincerely.

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**RALPH KILLIAN** 

Exhibit No. **RK-12** 

Sheet 1

of 1

JOHNSON AND ASSOCIATES

**EXHIBIT** 

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Commissioners:

J. TERRY DEASON, CHAIRMAN
SUSAN F. CLARK
JULIA L. JOHNSON
DIANE K. KIESLING
JOE GARCIA



DIVISION OF ELECTRIC & GAS JOSEPH D. JENKINS DIRECTOR (904) 488-8501

## Public Service Commission

August 24, 1994

Mr. Barrett G. Johnson Johnson and Associates 315 South Calhoun Street Suite 350 Tailahassee, Florida 32301

Dear Mr. Johnson:

This is to confirm receipt of your letter dated August 23, 1994 concerning Panda Kathleen's plans to begin satisfying its contractual obligation with Florida Power Corporation by installing the units described in your letter. Based on the representations, I foresee no reason why this is any type of contract change that should come before the Commission for approval. I discussed this briefly with Florida Power's Bob Dolan and he concurred.

Sincerely,

Joseph D. Jenkins

Director

EXHIBIT

-6-

Division of Electric and Gas

JDJ/ms

Docket 95-0110-El

RALPH KILLIAN

Exhibit No.

RK-13

Sheet 1

of 1

FLETCHER BUILDING = 101 EAST GAINES STREET = TALLAHASSEE, FL 32399-0850
An Affirmative Action/Equal Opportunity Beoployee

FPSC DOCKET NO. 950110-EI EXHIBIT NO. \_\_\_\_RK-14

## FINANCIAL INCENTIVES FOR POWER PURCHASES "A UTILITY'S VIEW"

Presented at the Gulf Coast Cogeneration Association 1992 Spring Meeting Held April 21, 1992

by

Robert D. Dolan

Manager, Cogeneration Contracts and Administration

Florida Power Corporation

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RALPH KILLIAN

Exhibit No.

**RK-14** 

Sheet 1 of 7

## Financial Incentives For Power Purchases "A Utility's View"

By Robert D. Dolan

Financial incentives for utilities to purchase power from qualifying cogeneration and small power production facilities (QFs).

What a concept!

Many QFs already think the utilities have these. Don't they resell the power for profit? If you believe this, read on. As a utility employee, I feel I may be able to enlighten and change this widely held notion. A utility makes profit based on its investment or rate base and the rate of return allowed by the utility commission. The Florida Public Service Commission (FPSC) establishes these rates for Florida Power Corporation (FPC). Presently, a rate case has begun to allow additional facilities to be included in the rate base.

Many industry experts have begun stating that there must be incentives for the host utility if the QF industry is to continue their success story. Presently, some states are beginning to implement these. Since the passage of PURPA in 1978, Florida is one of the regions which has seen explosive growth in the development of QF projects. The market has developed from "mom and pop" operators to large corporations. The word cogeneration has even been included in "Websters Dictionary". This indicates that cogenerator is no longer in the outer fringes of the nation's power supply.

During this entire period, incentives for the host or purchasing utility have been and continue to be ignored. Recent legislation (Johnson and Sharp Amendments) continue to ignore incentives for utilities. Without the inclusion of financial incentives for the utility, the QF purchases have some additional risks without compensation.

At this time, let me share with you some of FPC's experience with QFs.

Since the passage in 1984 of the FPSC rules allowing firm purchases from QFs, Florida Power Corporation has purchased almost 1,100 MWs. FPC has purchased more QF capacity than any other utility in the state of Florida. These firm purchases account for 15% of our generation resources and over \$188,000,000 in capacity payments in 1997.

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Exhibit No. RK-14

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Due to this large commitment, FPC and the FPSC have tried through contractual terms and regulation to mitigate some of the risks involved in QF purchases. These contractual terms allow for performance based contracts. These risks can primarily be divided into three areas: 1) market, 2) operating and 3) regulatory risks.

#### 1) Market Risks:

All contracts are equal to or below the Company's avoided cost as defined and approved by the FPSC. Capacity payments are structured so that they are very low during the early years of the contract and escalate at a rate approximately equal to inflation over time thus eliminating "rate shock". Fuel costs are indexed to actual fuel prices at Company generating units or generating units designated by the state. Additional avoided fuel cost payments, where applicable, are based on actual system marginal fuel costs. Most of FPC's contracted capacity is based on avoiding coal capacity.

All contracted capacity is expected to remain economical throughout the contract period. The expected future need for capacity in Florida is great, therefore it is virtually certain that this capacity will be needed. Florida's population keeps expanding even during recessionary periods, planned reserve margins are low, and there is significant reliance on demand-side management. These factors assure that there will be a market for this capacity FPC has under contract.

#### 2) Operating Risks:

There is significant diversity in the type of capacity being built by the QFs under contract with FPC. Only projects which were deemed to have a high likelihood of being completed and achieving commercial operation were selected. Presently, FPC is estimating 25% of future projects will fail to achieve commercial operation. Therefore, more capacity than required was contracted to allow for the failure of some projects.

Most contracts provide for proration below the committed level and all contracts have a minimum performance level below which no capacity payments are made. Most of the capacity under contract has on-peak availability performance requirements which assure that the capacity is available when it is most needed by FPC. This also reduces the capacity payment if the QF does not meet his capacity factor obligation.

While only one of FPC's contracts is dispatchable, most have energy pricing provisions which give the seller an additional incentive to produce energy during peak periods (performance adjustment).

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Sheet 3 of 7

All FPC's contracts require that the sellers coordinate their scheduled outages with the Company.

#### 3) Regulatory Risks:

Regulatory risk in Florida is virtually nonexistent for the reasons outlined below.

The FPSC and Florida Legislature has encouraged contracts for capacity with qualifying facilities.

All contracts are pre-approved by the FPSC.

All contracts, except for one, have a regulatory out provision which provides for renegotiation of payments to a level that is allowed for recovery as well as a refund of disallowed payments from the QF.

The capacity and energy costs are fully recoverable through the fuel adjustment clause. The fuel adjustment is updated every six months or sooner if necessary.

Even though I consider our situation to be very favorable, both regulatory and contractually, additional risk has recently surfaced, the impact on credit rating due to utility purchases. These include QF, IPP, and inter/utility purchases. IPP and utility purchases are different since presently there is no legal obligation to purchase from these sources and are voluntarily entered into.

A bond derating could significantly increase annual interest expenses for FPC's customers. Also, this could adversely impact stock prices. A declining stock price would require issuing additional shares to raise the equity required to finance the construction program. This would also decrease earnings per share which may make the stock less attractive to investors.

Some utilities favor purchases rather than construction of their own power plants due to the possibility of cost overruns, schedule delays, and unfavorable regulatory treatment. Florida Power Corporation in the past through construction and management efforts has avoided these problems. Presently, we have under construction, 364 MWs of peaker capacity (4 combustion turbines). In addition, another 364 MWs of peaker capacity which will begin construction by the end of 1992. Also, FPC recently received a need certificate to construct two 235 MW natural gas-fired combined cycle facilities in the late 90's.

FPC's construction schedule is as follows:

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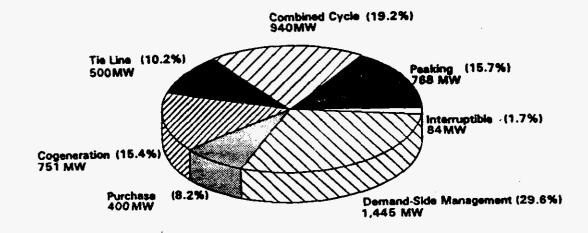
#### PROPOSED FLORIDA POWER CORPORATION SUPPLY SIDE FACILITIES

Date	Туре	Size
11/92	4 Combustion Turbines	364 MW
11/93	4 Combustion Turbines	364 MW
11/93	University of Florida Cogeneration Facility	40 MW
7/97	500 KV Transmission Line	245 Miles
11/98	1 Combined Cycle Facilities	235 MW
11/99	2 Combined Cycle Facilities	470 MW
11/2000	1 Combined Cycle Facility	235 MW
	TOTAL	1748 MW

The late 90's combined cycle facilities will encourage new gas transportation facilities for the state of Florida to fuel both utility and QF/IPP generation.

As illustrated above, we have increased our resource diversity and construction schedule.

The following pie chart illustrates FPC's capacity additions from 1992 through 2001 including demand side programs.



#### **RESOURCE ADDITIONS FROM 1992 THROUGH 2001**

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As can be seen in this chart, FPC has included significant amounts of Demand Side Management (DSM) and purchases. The DSM programs account for 1,445 MWs of future capacity and include both conservation and load management. Presently FPC has approximately 700 MWs of load management.

There are no financial incentives for DSM programs in Florida. Recent FPSC and legislative attempts to include DSM incentives have been delayed or canceled. Conversely, there are no legal road blocks to prevent future implementations of DSM incentives.

Some industry analysts oppose financial incentives to encourage utilities to purchase supply resources siting competitive procurement as the answer. Competitive procurements only provide financial incentives for the customers of the utility. Some QFs have proposed a shared rate of return methodology in which, any income over a specified rate of return would be shared between the utility and the QF. FPC has leased a retired plant to a QF developer using this approach. However, all benefits from this type of arrangement, including purchases, result in savings by the utilities customers.

In Docket No. 910603-EQ Implementation of the Rule 25-17.080 through 25-17.091, F.A.C. regarding cogeneration and small power production, the Commission Staff in their recommendation issued on November 21, 1991 stated the following:

As discussed above, Staff realizes that utilities currently do not get compensation for accepting the risk (no matter how small) of the removal of the regulatory out clause. However, Staff was unable to identify any rules or regulations prohibiting utilities from petitioning the Commission to allow them to earn a profit in return for accepting the risk associated with the removal of a regulatory out clause in a particular contract. Of course, the sum of the return and the contract price should not exceed the utility's full avoided cost. There are positive and negative aspects to such a "split in savings" approach which would be examined if and when a utility petitions to do so.

Presently, QF purchases provide incentives for the customers and QFs. Incentives for utilities would have to be introduced to help offset some of the financial risks involving the utility. These incentives could include a shared savings approach. The customer and the utility would split the difference between the avoided costs and the contractual costs. Another method would be to tie the incentive payment directly to the performance of the contract (Utility Contract Management). A similar approach is presently being used in Florida for utility generation known as the Generation Performance Incentive Factor (GPIF). This gives the utility financial incentives or penalties for the actual performance versus expected performance of utility owned generation.

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A third approach would be a sale lease-back arrangement with the utility being the lessee and operator of the facility. This lease could also contain a fixed or negotiated buy out price at the conclusion of the lease (similar to leasing an automobile). This lease could also be structured as a lease purchase.

Financial incentives for the purchasing utility need to be implemented to mitigate some of the financial and operational risks involved in purchasing QF capacity. These financial incentives would make QF purchases more attractive to utilities.

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## Florida Power

April 29, 1993

Mr. Mark E. Bentley Attorney Panda-Kathleen, L.P. 4100 Spring Valley, Suite 1001 Dallas, Texas 75244

MAY - 3 1993

RE:

Standard Offer Contract for the Purchase of Firm Capacity and Energy From a Qualifying Facility Less Than 75 MW or a Solid Waste Facility Between Panda-Kathleen L.P. and Florida Power Corporation

Dear Mark:

This letter concerns our earlier meetings and your letters dated January 26, 1993 and March 23, 1993. In consideration of Florida Power Corporation's (FPC) waiver of the early in-service date to January 1, 1997, Panda-Kathleen, LP waives early payments and thereby elects normal payments pursuant to Schedule 3, Page 1. In addition, FPC will allow a corresponding delay of the construction commencement date.

If the foregoing accurately reflects your understanding of our agreement with respect to the subject matter set out above, please so indicate by signing in the space provided below, and returning a signed counterpart hereof to me.

Very truly yours,

Florida Power Corporation

Robert D. Dolan

ACCEPTED AND AGREED TO THIS 3 DAY OF

199

Panda-Kathleen, L.P.

cc:

ROD #4.Businosir

M. B. Foley, Jr.

A. J. Honey

J. P. Fama D. W. Gammon

Exhibit No.

**RK-15** 

Sheet 1 of 1

RALPH KILLIAN

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