

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

)

IN RE: Petition for determination) of need for Hines Unit 2 Power) Plant by Florida Power Corporation.)

DOCKET NO. 001064-EI

BRIEF OF PANDA ENERGY INTERNATIONAL, INC.

Suzanne Brownless, Esq. Suzanne Brownless, P.A. 1311-B Paul Russell Road Suite 201 Tallahassee, Florida 32301 Phone: (850) 877-5200 FAX: (850) 8878-0090

ATTORNEY FOR PANDA INTERNATIONAL INC.

DOCUMENT NUMBER-DATE

14735 NOV 158 FPSC-RECORDS/REPORTING 2060

1

. . . .

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

)

IN RE: Petition for determination) of need for Hines Unit 2 Power) Plant by Florida Power Corporation.)

DOCKET NO. 001064-EI

BRIEF OF PANDA ENERGY INTERNATIONAL, INC.

Suzanne Brownless, Esq. Suzanne Brownless, P.A. 1311-B Paul Russell Road Suite 201 Tallahassee, Florida 32301 Phone: (850) 877-5200 FAX: (850) 8878-0090

ATTORNEY FOR PANDA INTERNATIONAL INC.

Pursuant to PSC-00-1960-PHO-EI, Panda Energy International, Inc. (PEII), files this post hearing brief, and in support of its positions in this docket states as follows:

FACTS

On August 7, 2000, pursuant to Section 403.519, Florida Statutes, and Rules 25-22.080 and 25-22.081, Florida Administrative Code, Florida Power Corporation (FPC) filed a petition for determination of need to construct a 530 MW combined cycle natural gas fired electrical power plant to be located in Polk County, Florida at its Hines Energy Complex. At that same time, FPC filed the testimony of John B. Crisp, Eric G. Major, Robert D. Niekum, Peter M. O'Neill, W. Jeffrey Pardue and Alan S. Taylor.

The Commission issued Order PSC-00-1561-PCO-EI on August 30, 2000, establishing the procedures to be followed in this case. And pursuant to that procedural order, Billy R. Dickens filed testimony on behalf of the Commission Staff on September 18, 2000. In response to this testimony, FPC filed the rebuttal testimony of John J. Flynn and Dr. Charles J. Cicchetti on September 25, 2000.

On October 3, 2000, FPC filed motions to strike Staff's Preliminary Issue 6 and the testimony of Mr. Dickens. The Prehearing Conference was held on October 11, 2000. Prehearing Officer Jabor issued Order PSC-00-1933-PCO-EI on October 19, 2000 granting the motion to strike Preliminary Issue 6 but denying the motion to strike Mr. Dickens' testimony. Panda Energy International, Inc. (PEII) filed a petition for intervention on October 12, 2000, which was granted by Order No. PSC-00-1959-PCO-

-2-

EI, issued on October 24, 2000. Prehearing Order No. PSC-00-1960-PHO-EI, was also issued on October 24, 2000. Motions for reconsideration of the Prehearing Officer's orders granting PEII intervention and denying FPC's motion to strike the testimony of Mr. Dickens were filed by FPC on October 24, 2000. PEII filed a motion for continuance of the hearing on that date as well. FPC filed a response in opposition to PEII's motion for continuance on October 25, 2000.

A hearing before Commissioners Jacobs, Jabor and Baez was held on October 26 and 27, 2000, at which time the PEII's motion for continuance and FPC's motions for rehearing on PEII's intervention and Mr. Dickens' testimony were all denied.

SUMMARY OF POSITION

FPC's request for a need determination for a 530 MW natural gas fired combined cycle electrical power plant should be denied for several reasons. First, FPC has not proven that it needs 530 MW in 2003. The record substantiates that at most 130 MW of capacity is needed on FPC's system in the fall of 2003. Capacity which could be more economically purchased from PEII or more economically provided by the construction of a 165 MW combustion turbine. Second, FPC failed to conduct a fair bidding process by publishing vague evaluation criteria in violation of Rule 25-22.082, Florida Administrative Code; improperly modeling PEII's bids; using a 25 year time frame when 2 years would have been more appropriate; and failing to have meaningful independent evaluation of its bid evaluation methodologies. Third, FPC has failed to

-3-

prove that Hines Unit 2 is the most cost effective means of meeting even its inflated need of 530 MW in 2003. At best it has proven that PEII's bid and the Hines Unit 2 option are equally cost effective. FPC should not be granted a need determination to construct a power plant that is really designed to meet the needs of a deregulated Florida power market.

ISSUES AND POSITIONS

- Issue 1: Is Florida Power Corporation (FPC) an "applicant" within the meaning of the Siting Act and Section 403.519, Florida Statutes?
- Position: Stipulated by FPC and FPSC Staff. Yes. FPC is an "applicant" within the meaning of the Siting Act and Section 403.519, Florida Statutes.

This Stipulation was entered into at the Prehearing Conference held on October 11, 2000 in which PEII did not participate as it was not yet a party to the docket. [Prehearing T. 13]

- Issue 2: Is the output of the proposed Hines Unit 2 fully committed for use by Florida customers who purchase electrical power at retail rates?
- Position: Stipulated by FPC and FPSC Staff. Yes. The proposed Hines Unit 2 will be fully committed to helping FPC meet its obligation to provide reliable electric service to rate payers at a reasonable cost. This does not preclude PFC from making wholesale sales inside and outside the state when it is in the best interests of FPC's retail ratepayers. The entire Hines plant will count toward FPC's reserve margin.

This Stipulation was entered into by FPC and Staff subsequent to the Prehearing Conference conducted on October 11, 2000 and while PEII's petition for intervention was pending. [Prehearing Conference T. 48] Thus, PEII did not agree to stipulate this issue. While PEII understands that intervenors take the case as they find it under FPSC rules, and therefore, that this stipulation is valid and binding in this docket, PEII wishes to state for the record that it does not agree that FPC's proposed Hines Unit 2 plant is "fully committed" for purposes of the Siting Act as contemplated by the Florida Supreme Court in <u>Tampa Electric</u> <u>Company v. Garcia</u> (TECO), 25 Fla. L. Weekly S294 (Fla. Apr. 20, 2000), revised 25 Fla. L. Weekly S730 (Fla. Sept. 28, 2000).

Approximately 130 MW of the 567 MW of Hines Unit 2's winter net plant capability will be used to meet FPC's agreed upon reserve margin of 20% in winter peak period of 2003-04. [T. 287] Thus, approximately 440 MW of this plant will not be needed to meet currently projected 20% winter peak reserve margin capacity needs. [T. 288]

- 5 -

FPC argues that all of this capacity will "count" toward the calculation of its reserve margin and will be available to meet its customer's needs.

The availability of wholesale power transactions from Hines Unit 2 is further substantiated by the fact that the PWRR analyses run by FPC on Hines Unit 2 and all bid options granted both bidders (PEII and Bidder B) as well as FPC "capacity credits" for power that would be sold on the wholesale market in excess of FPC's 20% reserve margin. [T. 382-84]

Under a scenario where a utility admits that approximately 78% of its proposed unit will be sold on the wholesale market at time of 2003-04 winter peak (FPC's highest demand period) absent some extremely unusual forced outage event, the plant is not "fully committed" to providing electricity to retail ratepayers under the <u>TECO</u> decision.

2065

- Issue 3: Is there a need for the proposed Hines Unit 2, taking into account the need for electric system reliability and integrity, as this criterion is used in Section 403.519, Florida Statutes?
- Position: No. Only 37-130 MW of the 567 MW net winter peak capacity of Hines Unit 2 is necessary for Florida Power Corporation (FPC) to meet its agreed upon 20% reserve margin in the 2003-04 winter peak.

FPC supports its assertion that the 530 MW of nominal capacity associated with Hines Unit 2 is needed in the winter of 2003-4 with the following rationales:

1) Need to comply with the 20% reserve margin criterion agreed to by FPC and approved by the FPSC in Order PSC-99-2507-S-EU, issued on December 22, 1999 (Order 99-2507) [T. 125; Ex. 5, Need Study Appendix C];

2) Attrition in its Demand Side Management programs, specifically those targeting residential customers, leading FPC to believe that these direct load control programs will not actually be able to produce as much demand reduction as previously thought [T. 126-7];

3) Fuel savings of approximately \$40 million attributable to the use of more efficient combined cycle technology using natural gas [T. 128]; and

4) Plant and fuel diversity, i.e., Hines Unit 2 provides intermediate capacity using combined cycle technology fueled by natural gas. [T.128-9]

While PEII agrees that a combined cycle natural gas fired unit will produce fuel savings and provide plant and fuel diversity to

-7-

FPC's system, FPC has not proven that 530 MW is necessary to meet a 20% reserve margin nor that residential demand side management cannot be reasonably relied upon to meet projected demand side projections.

With regard to the 20% reserve margin target being utilized by FPC, PEII would first note that neither the Florida Reliability Coordinating Council (FRCC) nor Florida municipal or electric cooperative utilities have adopted a 20% reserve margin as its reliability criterion, but continue to use a 15% reserve margin number. Second, the calculation of the 20% reserve margin pursuant to Order No. 99-2507 is as follows: "Reserve Margin (%) = [(Total Firm Capacity - Peak Firm Demand/Peak Firm Demand] x 100, where Total Firm Capacity will be based on generating capacity owned by the IOUs or capacity for which there is firm commitment to these IOUs and where Peak Firm Demand means total demand reduced by demand side resources." [Ex. 5, Need Study at Appendix C; Order 99-2507 at Attachment A (Stipulation) at ¶ 4, page 8] That is, the formula stated in Order No. 99-2507 assumes that all demand side resources approved by the FPSC, including FPC's Residential Energy Management Program, will be taken into account MW for MW in calculating Peak Firm Demand.

This definition of reserve margin was applied by FPC in the development of its April, 2000 Ten Year Site Plan, the integrated resource planning process used by FPC to develop "the most costeffective mix of supply-side and demand-side alternatives that will reliably satisfy the Company's future energy needs." [T. 129-30]

- 8 -

The Base Case Winter Peak Demand Forecast indicates that FPC lost 25 MW or 3% of its residential load management MW from 1998 to 1999 (874 MW-849 MW). [Ex. 5, Ten Year Site Plan at 18]

Residential load management attrition

FPC predicts that in 2000 40 more MW of residential load management will be lost (5%), followed by 65 MW in 2001 (8%), 43 MW in 2002 (6%) and 28 MW in 2003 (4%). [Ex. 5, Ten Year Site Plan at 18]. Thus, for the five year winter peak period 1998-2003, FPC projects that there will be a cumulative decrease in MW reductions due to residential load management of 201 MW or 23%.

During this same period of time, interruptable load usually associated with industrial and other large users will increase by 23 MW or 8% and commercial and industrial load management will increase by 12 MW or 67%. [Ex. 5, Ten Year Site Plan at 18] The projected trends are for industrial customers to provide significantly more demand side management MW to FPC and residential customers to provide significantly less in the same five year period.

The projected decline in residential demand side management MWs is significantly greater than that directly associated with demonstrated residential customer attrition. And, the decrease in residential load management MWs is contrary to the increase in demand side management MW associated with industrial/commercial customers projected by FPC. If attrition is caused by a customer's perception that he/she will be interrupted, and all load management customers have the same likelihood for interruption, why does FPC

-9-

believe residential customers will flee in greater numbers than industrial customers? Or flee at higher rates in 2000, 2001, 2002 or 2003 than in 1999? Further, why would residential customers continue to leave the system at greater than historic percentages, as FPC's forecast of winter peak demand predicts, once Hines Unit 2 comes on line and the likelihood that interruptions will occur is less than before?

The answer is simple. FPC does not really believe that it will lose more DSM residential customers annually than it did in 1999, FPC wants "the flexibility to stay off the DSM program as much as possible through those periods where we have got long-term exposure to increased peaks in demands." [T. 297] In other words, FPC wants the ability to return to installed capacity levels where load management and interruptable customers pay reduced rates without suffering the inconvenience of service interruptions. Or as Commissioner Jacobs correctly observed, FPC wants to "pursue building options to avoid them [interruptable customers] having to encounter the risk of being on the DSM program." [T. 298]

If residential demand side management numbers are to be adjusted downward, historical data should be used, not biased FPC projections. This would result in a reductions in residential load management of 120 MW, rather than 210 MW, over the time frame from 1999-2003, which lowers system winter peak demand in 2003-2004 by 90 MW.

<u>Reserve margins</u>

FPC has stipulated to provide, and the FPSC has approved,

-10-

2069

reserve margins of 20% by the summer peak of 2004. [Ex. 5, Need Study, Appendix C, Order 99-2507 at 3-4; T. 282] The record is clear that without Hines Unit 2, in the summer of 2003 the reserve margin is 26%. [Ex. 5, Need Study, Appendix D at 68] For the year 2004, FPC's summer reserve margin without Hines Unit 2 is 22%. [T. 296; Ex. 10] Thus, FPC is not building Hines Unit 2 in order to meet the stipulated 20% reserve margin in the summer of 2004. FPC's analysis shows that it is in the summer of 2005, two years later than the in-service date of the proposed plant, that FPC's summer reserve margin dips below the target 20% figure. [Ex. 10, Crisp Deposition Exhibit 3] This plant, by FPC's own calculations, is at least two years premature if summer peak calculations are used.

Without Hines Unit 2 at the time of winter peak in 2003/2004 FPC has approximately an 18.4% reserve margin. [Ex. 10] With the 567 MW of net winter capability of Hines Unit 2 added, there is approximately 440 MW of capacity above the 127 MW of capacity needed to bring FPC up to a 20% reserve margin. [T. 287-8] Thus, the amount of capacity that is needed in the winter peak of 2003/2004 is 37 MW greater than the 90 MW which would have been "added back" to FPC's total available capacity if historical attrition rates had been used by FPC to calculate available residential DSM MW in 2003.

FPC does not need to build a 567 net winter capacity power plant to economically provide 37 MW of power. The only rationale that could support the construction of a 567 MW plant in 2003 when

-11-

2070

at most 127 MW of additional capacity is needed is based on better economics, i.e., it is cheaper to operate a new combined cycle plant than existing system plants. However, FPC flatly denies that in the winter of 2003-04 the need for Hines Unit 2 is "an economic one and not a reliability one" or that the need is only for 127-130 MW of capacity. [T. 296] And, it must do so. For if FPC admits that its need really materializes in 2005, then it is possible that the PEII's lowest priced 250 MW power block could more economically meet that need. That is, FPC could more economically meet its capacity concerns by purchasing power from PEII for those two years than constructing it.

In sum, FPC justifies the 440 MW of "excess" capacity at issue in this docket by repeatedly stating that it must prepare for a catastrophic plant outage (loss of a coal unit) or DSM cancellations larger than FPC's own already highly inflated projections. [T. 295, 298-9] Events above and beyond what can be rationally predicted by use of accepted industry methods. This type of justification is bogus and should not be accepted by the FPSC as competent substantial evidence. Particularly in light of the circumstances that exist here.

Those circumstances are clearly set forth in FPC's own strategic analysis of the Hines Unit 2 option.

-12-

The availability of wholesale power transactions from Hines Unit 2 is further substantiated by the fact that the PWRR analyses run by FPC on Hines Unit 2 and all bid options granted both bidders (PEII and Bidder B) as well as FPC "capacity credits" for power that would be sold on the wholesale market in excess of FPC's 20% reserve margin. [T. 382-84]

-13-

2072

				e e e e e e e e e e e e e e e e e e e	a - 4 - 5
		and the second		:*	
•	11				ng kitaka karana N
		(1,1) (0,1			
		an a			به مانی مر م
		$= - \int_{\Omega} \left[\int_{\Omega} $	an tha an an Anna an An	n an an Anna Anna Anna Anna Anna Anna A	
1.0	and the set where				
N			and the second second second second		
· · · ·	n na stagadh na chuir a' chuir an stàiteann an stàiteann an stàiteann an stàiteann an stàiteann an stàiteann a Tha stàiteann an stài			and a start of the second start of the	· . ·
				the sector is a second of the second	2 e 1 4 -
			. '		· · · · · · ·
	•				
			1 •	and the second second	
i.		and the second second second second second			
	$\frac{1}{2}$	and the second			
					NA KA
	•			n an she ta Mara ƙasar a ƙasar ƙwallon. Ar	
		and the second secon	n de la construcción de la constru La construcción de la construcción d		
	1			and the state of the	
	and the second sec				
			N		
		and the second			
	1	·····································		$\frac{1}{2} \sum_{i=1}^{n-1} \frac{1}{2} \sum_{i=1}^{n-1$	
				and the state of the	1.00
			$e_{i} = e_{i} e_{i} e_{i}$		
n an an a'	Surgeral and a submit of	n general a <mark>allen a</mark> sa	a an an an Arrent an an an an Arrent an A Arrent an Arrent an Ar	ng ana mang mang mangkalakakan menang bahakatan tahun T	i da apar
			$\frac{1}{2} \frac{1}{2} \frac{1}$		
	н. Т				

FPC has not proven a need for 530 MW of capacity in 2003. FPC has proven a need for 37 to 130 MW of additional capacity in 2003, capacity that might be more economically be purchased from PEII.

-14-

· · ·

- Issue 4: Is there a need for the proposed Hines Unit 2, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519, Florida Statutes?
- Position: No. Since only 130 MW of capacity is needed by FPC in 2003-04, construction of the Hines Unit 2 is not the option that supplies adequate electricity at a reasonable cost. Further, the relevant time frame over which to review the cost effectiveness of this plant is 2003 through 2005, the year in which FPC anticipates that this plant will be removed from rate base regulation. When this timeframe is used PEII's lowest priced 250 MW block more closely matching FPC's reserve margin needs could be more cost effective.

As discussed above, the data provided in this case indicates that FPC does not need 530 MW of capacity to meet its reserve margin needs in the summer of 2004. The data does indicate that for the winter peak of 2003-04 approximately 130 MW of capacity is needed to maintain a reserve margin of 20% as agreed to by FPC in Order No. 99-2507. If historical attrition rates are used for the residential load management programs from 1999-2003, the actual capacity needed is in the range of 37 MW.

Thus, FPC is building a power plant that does not match its current capacity needs. FPC admits that it can buy 100 MW "in a heartbeat." [T. 295] However, FPC alleged that the power purchase market was "continuing to rise" and that "the total amount of dollars that you would have to pay for seasonal blocks of capacity call options to cover this, it greatly exceeds the amount you would have to pay for a generating unit." [T. 291]

However, FPC did not go to the market seeking a two year capacity option for 130 MW. And, in fact FPC presented no hard

-15-

2074

data substantiating its assertion that the capacity market in Florida was "continuing to rise." In fact, when offered 250 MW by PEII for two years at \$6.75 Kw/mo. with variable O&M of \$1.50 MW/hr. and \$1.53 MW/hr. for the first and second year respectively, FPC rejected that bid out of hand. [T. 184-5, 187] PEII's capacity by FPC's own analysis was less than one-half percent higher than that of the Hines Unit 2 in 2003. [T. 320; Ex. 7] Thus, in 2003, the revenue requirements associated with PEII's units and that of Hines Unit 2 were virtually identical. In sum, FPC could have purchased power from PEII which would have been identical in price to that of Hines Unit 2 in 2003.

In addition to the fact that FPC could have purchased short term capacity from PEII, FPC could also have constructed a 165 MW combustion turbine for substantially less capital costs than Hines Unit 2 (272 \$/kw vs. 312 \$/kw). [Exhibit 5, Need Study at 34] This unit would have had essentially the same variable O&M and operational costs as that of Hines Unit 2 (2.9 \$/kw-year vs. 2.5 \$/kw-year). [T. 292; Ex. 5. Need Study at 34] Thus, a 165 MW combustion turbine unit would have been economically preferable over this two year period if a unit was going to be constructed by FPC.

Inherent in FPC's analysis is the fact that whatever capacity is constructed or purchased will be needed for a 25 year time period, i.e., the expected life of Hines Unit 2. [T. 290] Thus, the time period over which the PWRR analyses were conducted by FPC is 25 years. [T. 225]

-16-

· 《· 如何是你们是我们也不能能说这个话,我们就是我们的意思,我们还是你的这些事实,我们还是你们的我们就能不是你的你?""你是我们的你们,我们就不能是我们,我们是你是你, and the press

111

 $(x_1,y_2,\ldots,y_{n-1},y$

and the second of the particular had

.

Contract States

5.5

1.2.2

. Areas

14

Use of this time period also assumes that FPC will continue to

be rate base regulated over that entire 25 year period. [T. 233,

ารกรรมการสรรรณภาพที่สุดสรรมการกรรมสรรรณภาพที่สุดสรรณภาพที่สุดสรรณภาพที่สุดสรรณภาพการสรรณภาพการสุดสรรณภาพการสุด

381]		
an an an an Anna an Ann Anna an Anna an		
$\sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j$	•	
	n ny an 1997 ang	
		n an an an an an ann an Anna an An anna an Anna Anna an Anna an
n en la seconda de la secon La seconda de la seconda de La seconda de la seconda de		n 1997 - Andrea Standard, anna an Anna Anna Anna Anna Anna Anna
en norma a sensor a se en esta de ser en	- Auffer opper til Affer Hold in	felteren i de la falant, en ella surregia plant es surregia de la seconda de la seconda de la surregia de la se La seconda de la fala de la seconda de la La seconda de la seconda de
たいではある。この「新し」によった。 必要発見 し、ため、また、「知うたえた」よりに対応された。	an esta an	

-17-

2076

an Carlan at a 12 process with a large process with

Because the FPC needs at most 130 MW of capacity in 2003 and not 530 MW and because the timeframe over which the plant should be evaluated is 2 years rather than 25 years, FPC's PWRR analyses are incorrect and do not substantiate that Hines Unit 2 is providing adequate electricity at a reasonable cost.

-18-

- Issue 5: Has Florida Power Corporation met the requirements of Rule 25-22.082, Florida Administrative Code, "Selection of Generating Capacity", by conducting a fair bid process?
- Position: No. FPC's RFP was biased toward its own self build option Hines Unit 2 for strategic reasons totally unrelated to FPC's ratepayer's interests. Bid evaluation procedures were so vague as to be violative of Rule 25-22.082(4)(d), F.A.C. Key data and PWRR runs were not verified by independent sources. Evaluation time periods were too long. PWRR analyses improperly modeled PEII projects to PEII's detriment.

FPC's bid process can be divided into several pieces: the RFP environment; the general scheme of the RPF process; the content of the RFP itself; the methodology used to evaluate the bids received; and whether or not the RFP and evaluation methodologies were subject to objective review by competent outside source(s). The record reflects that FPC's bidding process is fatally defective on all counts as discussed in more detail below.

RFP Environment

Why did FPC issue an RFP for 530 MW of capacity in 2003 at all? The short answer is that the Commission ordered them to do so. On October 20, 1998, FPC filed a request for a waiver of the bidding rule for Hines Unit 2 based upon its "unique cost, scheduling, site, environmental, and utility control advantages of constructing a second unit at its existing Hines Energy complex." [Ex. 3, 99 FPSC 2: 92-3] Due to the "practical limitations experienced with the company's reliance on dispatchable DSM programs (direct load control), and the adequacy of reserves statewide" FPC accelerated its Hines Unit 2 from late 2004 until

-19-

the summer of 2001. [Ex. 3, 99 FPSC 2:93] FPC also noted that Hines 2 would have "a scheduling and cost advantage over other supply side alternatives." [Ex. 3, 99 FPSC 2:94] FPC specifically cited the fact the 1998 summer heat wave caused about 46,000 residential customers to leave FPC's load management program returning 50 MW of firm load to FPC's system. [Ex. 3, 99 FPSC 2: 95]

In exchange for allowing FPC to construct Hines Unit 2 and bring it on line in June of 2001, three years ahead of its own schedule, FPC agreed to forego a rate case to increase its base rates for at least five years from the unit's commercial in-service date (mid 2006). [Ex. 3, 99 FPSC 2:94] However, FPC would include the capital costs and non-fuel O&M expenses as legitimate utility expenditures for surveillance reporting purposes when the unit went into commercial operation. [Ex. 3, 99 FPSC 2:96]

The Commission denied FPC's request for several reasons: the unit would not help meet the winter 2000/01 reserve margin shortfall; FPC was aware of this shortfall in at least April of 1998 but did not initiate an RFP process then; FPC was negotiating, and ultimately signed, a contract with the City of Bartow in May of 1998 and FPC could not prove that Hines Unit 2 was the most costeffective option available. [Ex. 3, 99 FPSC 2: 98-9]

In response to this bid waiver denial, FPC switched Intercession City peaking units P-12, 13 and 14 identified in its 1998 Ten Year Site Plan with the Hines Unit 2. [T. 164] This brings 282 MW of winter peaking capacity on line in December of

-20-

2000. [Ex. 5, 2000 Ten Year Site Plan at 71] As peaking units, these units were not subject to review by the Commission in a Need Determination and not subject to the Bidding Rule, Rule 25-33.0826, Florida Administrative Code. Switching these units affects the need for Hines Unit 2 which moves from late 2004 in FPC's 1998 Ten Year Site Plan to late 2003 in FPC's 2000 Ten Year Site Plan. [Ex. 3, 99 FPSC 2:93; Ex. 5, 2000 Ten Year Site Plan at 72]

Notwithstanding the denial of its waiver request in February of 1999, FPC did not begin to work on an RFP for the Hines Unit 2 capacity until the fall of 1999 at the time that the reserve margin docket was still pending. [T. 163-4; Ex. 5, Order 99-2507] FPC finalized its capacity needs in the fall of 1999 in connection with the reserve margin docket and issued the RFP on January 26, 2000. [T. 165]

What actions had FPC taken in regard to the Siemens Westinghouse 501F power block that was to eventually become Hines Unit 2 by January 26, 2000? Many and varied.

-21-

-22-

2081

2082

RFP Process and Content

FPC developed the RFP from November, 1999 until January of 2000 and issued the RFP on January 26, 2000. [T. 163-165] The RFP scheme outlined in the RFP proposal provided for the following steps to take place: Notice of Intent to Bid (2/20/00); Pre-Bid meeting (2/18/00); Proposals due (3/27/00), Short list Determination (5/19/2000), Complete Negotiations (8/1/2000) and Contract filed with FPSC (8/15/2000 - 9/29/2000). [Ex. 5., Need Study Appendix P at 1-2]

FPC developed its own list of 50 potential bidders to whom it sent its RFP directly as well as advertising the RFP in trade newspapers of general circulation in the power industry. [T. 167-8] Assuming that there are at least the number of potential power plant developers as those listed in the McGraw Hill Independent Power Producer Directory, more than 100, FPC can be reasonably said to have provided its RFP to at least 100 potential bidders. [T. 374] Yet only 13 entities responded to the Notice of Intent to

-24-

Bid; only 12 attended the non-mandatory pre-bid conference and only 2 actually submitted bids. [T. 374-5] Thus, the percentage of actual bidders was only 2% of available bidders and only 4% of those available bidders actually contacted by FPC. [T. 375] Even FPC's own witnesses considered this number of bidders to be "on the low side" and "disappointing". [T. 375, 167] However, FPC did not even consider rebidding. [T. 309]

The RFP contains a list of Hines Unit 2 "planned unit data estimates" found in Attachment D, a list of "non-price attributes" in Section IV.C. and a "proposal evaluation procedure" in Section V. [Ex. 5, Need Study, Appendix P] FPC did not provide, either in the RFP or in subsequent negotiations with both bidder, either bidder with information concerning the weight to be given to either price or non-price attributes identified in the RFP. [T. 169-71] Indeed, FPC did not even internally make any determination of the weight to be given to price vs. non-price attributes listed in the RFP. [T. 170-1]

Further, although FPC indicated that it would use "production costing models and other models so that all reasonable cost impact can be quantified", it did not specifically state that it would be using PROSCREEN or PROSYM, the models actually used. [T. 180] FPC's RFP indicates that once screening is conducted, a short list will be developed. [Ex. 5, Need Study Appendix P] FPC did not develop this short list instead unilaterally terminating discussions with both PEII and Bidder B on May 30, 2000. [T. 167, 278-9; Ex. 9] However, had FPC developed a short list, it would

-25-

have negotiated with the short listed bidders, and this negotiation would have necessarily developed a final proposal that was different than that originally proposed. [T. 183-4]

In sum, the fact the criteria by which the bid would be judged was vague, and with regard to non-price attributes highly subjective, and that no weighting was ever disclosed to the bidders for either price or non-price attributes, automatically makes this RFP violative of Rule 25-22.082(4)(d), F.A.C., which states that each utility's RFP shall contain at a minimum "a detailed description of the methodology to be used to evaluate alternative generating proposals on the basis of price and non-price attributes."

The more information that is provided to the bidder, the better and more responsive the bid received. PEII would suggest that the vagueness of the evaluation criteria, rather than the overwhelming attractiveness of the Hines Unit 2, is the reason that FPC received only 2 bids from a pool of at least 100 bidders.

After FPC received bids from PEII and Bidder B on March 27th, it contacted both parties and requested additional information from each bidder. [T. 184-5] After this information was received, FPC requested that PEII increase its bid from 250 MW to 500 MW. [T. 185] PEII did so, and provided FPC with two 250 MW power blocks for the same five year period, 2003-2008. [T. 185, 187] The first 250 MW block was priced as four separate capacity blocks: 2003-04 \$6.75 kw/mo.; 2005 \$7.10 kw/mo.; 2006 \$7.45 kw/mo; and 2007 \$7.80 kw/mo. Variable 0&M was priced for the first 250 MW unit as

-26-

follows: 2003 \$1.50 MW/hr with escalations of 2% per year for each year 2004 through 2007. [Conf. Ex. 5, Appendix to (JBC-3)] The second 250 MW block was priced at \$9.10 kw/mo. for years 2003-04; \$9.45 kw/mo. for 2005, \$9.80 kw/mo. for 2006 and \$10.15 kw/mo. for 2007. [Conf. Ex. 5, Appendix to (JBC-3)] The variable O&M for the second 250 MW block was priced the same as the first 250 MW block for all five years. [Conf. Ex. 5, Appendix to (JBC-3)]

FPC used PROSCREEN and modeled each of these blocks separately for each year with pricing for each 250 MW block escalating on both the capacity and variable O&M side. [T. 186, 190] Thus, each of PEII's 250 MW blocks competed in the screening process against each other and against a 530 MW Hines Unit 2. [T. 190] Since PEII's bids did not extend beyond five years, that is beyond 2007, FPC allowed the PROSCREEN model to optimize the plan and the model selected a generic 500 MW combined cycle unit for the remainder of the 25 year modeling horizon. [T. 189] The data associated with this generic 500 MW combined cycle unit was based on a full cost 501F Siemens Westinghouse unit. [T. 193-4, 201-2] FPC did not model 250 MW of PEII's cheapest capacity in year 2003 alone, all modeling was done based on 500 MW blocks. Nor did FPC average the capacity costs for PEII's two bids and model them as one unit for two years, then escalate the average capacity and O&M variables in years 2005, 2006 and 2007 for that combined unit.

Using these model inputs, the lowest cost PWRR for any combination of PEII's bids selected both 250 MW power blocks for the years 2003 and 2004 and the generic combined cycle unit from

-27-

2005 until 2028. [T. 189, 193] Because the generic 501F unit is used for years 2006 through 2028, existing unit operating expenses, purchased power and other production costs and new resource fuel and O&M revenue requirements (Columns 1, 2 and 4, Ex. 7, Staff Inter. 19) are the same for the Hines Unit 2 base case and PEII in [T. 199-200] For years 2003, 2004, 2005 the new these years. resource capital (financial) revenue requirement for PEII is \$100,224, while that for Hines Unit 2 is \$162,357. [Ex. 7, Inter. At the end of 2008, this disparity in capital revenue 191 requirements remains the same with Hines Unit 2 requiring \$591,171 to PEII's \$465,387, a difference of 21.2%. [Ex. 7, Inter. 19] Thus, even though FPC's model adds in a generic combined cycle unit in 2006 which escalates the capital revenue requirement for PEII's bid by \$80,306 or 257%, PEII is still the most cost effective from a capital revenue requirement point of view at that time. [Ex. 7, Inter. 19]

In the first two years of the bid the fuel and O&M revenue requirements which are associated with Hines Unit 2 and PEII are \$146,733 and \$203,887 respectively, or 39%. [Ex. 7, Inter. 19] While for this same period of time, existing unit production costs are \$1,270,441 for Hines Unit 2 and \$1,297,202 for PEII or 2.1% higher for PEII. [Ex. 7, Inter. 19] In sum, over the first two years of the contract, 2003-2004, the years in which PEII's pricing is used in the model, PEII's bid is not cost effective because of the fuel and O&M variable, not the capital cost variable. Stated another way, the 21.1% price advantage PEII has because of its

-28-

capital pricing is outweighed by the 39% disadvantage caused by its fuel and O&M pricing. This is partially explained by the fact that the fuel and O&M variable would contain PEII's capital costs due to recovery of purchased power capital costs through the fuel adjustment clause mechanism. However, quantification of the effects of this type of cost recovery were not separately provided. [T. 327-8]

One must question whether FPC can actually purchase natural gas for Hines Unit 2 39% cheaper than PEII can from the same two pipeline sources for the same generation competitive combined cycle units with virtually the same heat rates. [T. 305] Neither company has firm contracts with either FGT or an alternative pipeline in place at this time. [T. 331, 413-5] One must also question whether FPC can operate its 501F unit significantly cheaper than PEII's comparable GE unit. [T. 305]

The difference in the PWRR for Hines Unit 2 and PEII is 0.3% in 2005. [Ex. 7, Inter. 19] The difference in PWRR for Hines Unit 2 and PEII at the end of the 25 year study period is less than 0.4%. [T. 304] These tight margins could be completely erased, or turn in PEII's favor, due to variations in fuel prices or equipment prices of more than 0.4%, variations that are commonly experienced in the electric industry. [T. 304-305]

To conclude, FPC's modeling scheme is flawed for the following reasons:

1) The modeling term should have ended in 2005 the year FPC assumes that Hines Unit 2 will be removed from rate base and sold

-29-

at market based prices;

2) Modeling 500 MW in 2003 was incorrect for a maximum 130 MW need, however, if 500 MW was to be the target, PEII's projects should have been modeled as one 500 MW unit with capital and fuel/O&M costs associated with the two 250 MW bids averaged; and

3) The PROSYM model used to perform the sensitivity analysis was run from year 1 through year 10 with the data from year 11 through 25 projected. [T. 379]

Notwithstanding the flaws with its modeling, FPC relied heavily on its PWRR analyses, analyses which are too close and too dependent on fuel and equipment forecast accuracy, to declare FPC's Hines Unit 2 the winner. [T. 305] In fact, the PWRR analyses demonstrate that PEII and FPC's options are virtually the same.

Objective review

FPC hired PHB Hagler Bailly, Inc. (Hagler Bailly) to assist in the development of the RFP, oversee the evaluation and perform an independent review of the RFP responses. [T. 369] While FPC's rejection of PEII's bid was largely based upon the PWRR analyses preformed by FPC, Hagler Bailly did not, and indeed could not, attempt to replicate the PROVIEW or PROSYM PWRR runs. [T. 376, 378] Thus, Hagler Bailly cannot "testify to the voracity of the load forecasts." [T. 377] Neither can Hagler Bailly testify to the correctness of any of the data associated with the Hines Unit 2 found in Attachment D to the RFP, the data which provided the input into the PROVIEW and PROSYM PWRR model runs. [T. 389] To the extent that the data actually entered by FPC in the PROSCREEN

-30-

model is incorrect, the results may be erroneous. [T. 377]

Hagler Bailly did prepare a spreadsheet "response surface model", did verify that the numbers provided on its spreadsheet matched those in the bidders' RFP responses and did check to make sure that all of the responses were "reasonable". [T. 377, 387] With regard to the non-price attribute screening, Hagler Bailly did not attempt to contact PEII or any other third party and independently verify the reasonableness of any of the facts used or conclusions reached by FPC. [T. 384-87] Hagler Bailly simply took FPC's cost and FWRR data at face value, constructed a spreadsheet and looked to see if their spreadsheet was reasonably consistent with that data. One should hope so. Hagler Bailly did not independently verify any of the data input into the PROSCRREN or PROSYM model and did not independently verify the results of those all important FWRR model runs. All of its oversight was done by means of four Florida visits and phone calls. [T. 392-4]

While Hagler Bailly was not prohibited from asking bidders questions and while it did participate on some phone calls with PEII and Bidder B personnel, when questioned concerning the types of questions which Hagler Bailly asked, Hagler Bailly could not remember any specifics or even if it did ask any questions. [T. 386]

Based on the evidence adduced at hearing one gets the sense that Hagler Bailly's primary role in the RFP process was to bless the end product, whatever FPC determined that to be, not render its independent judgment.

-31-

In conclusion, FPC did not conduct a fair bidding process.

All other decisions - agreeing to a reserve

margin of 20% in December 1999, modeling lowering residential load management impacts in its Ten Year Site Plan process, moving the unit in service date from 2004 to 2003 - flowed from that decision.

No announced RFP

evaluation criteria, no independent verification of data, block modeling for PEII's two 250 MW power units, a 25 year modeling period and 14 years of projected PROSYM data were necessary to make PEII's bid second to Hines Unit 2. Even then, the PEII and Hines Unit 2 options are virtually identical. Issue 6: This issue was stricken by Order No. PSC-00-1933-PCO-EI. Is it reasonable to obligate Florida Power Corporation's retail customers for the costs of the Hines 2 Unit for the expected life of the Unit?

- Issue 7: Is the proposed Hines Unit 2 the most costeffective alternative available, as this criterion is used in Section 403.519, Florida Statutes?
- Position: No, for the reasons discussed in response to Issue 4 and further discussed in Issue 5. Based on the PWRR analyses conducted by FPC, Hines Unit 2 is, at best, no more cost-effective than the PEII bid and at worst being built to satisfy the needs of FPC in a deregulated power market.

- Issue 8: Are there any conservation measures taken by or reasonably available to Florida Power Corporation which might mitigate the need for the proposed power plant?
- Position: Stipulated by FPC and Staff. There are no conservation measures taken by or reasonably available to FPC which might mitigate the need for the proposed power plant.

This issue was stipulated by Staff and FPC at the Prehearing Conference held on October 11, 2000 in which PEII did not participate as it was not yet a party to the docket. [Prehearing T. 54].

- Issue 9: Based on the resolution of the foregoing issues, should the Commission grant Florida Power Corporation's petition to determine the need for the proposed Hines Unit 2?
- Position: No. FPC has not demonstrated that it has a need for the 530 MW Hines Unit 2 in 2003 nor that Hines Unit 2 is the most cost effective means of meeting the 37-130 MW of need that it has provided support for in 2003. Florida ratepayers should not be asked to pay for a plant which is being constructed to serve FPC's predicted deregulated market needs.

CONCLUSION

Based upon the evidence adduced at hearing, Florida Power Corporation has not proven by competent substantial evidence that it has a need for the 530 MW Hines Unit 2 power plant in 2003 or that this plant is the most cost effective means of meeting the 37-130 MW of need that it has provided adequate support for. For these reasons, Florida Power Corporation's request for a determination of need for the Hines Unit 2 electrical power plant should be denied.

Respectfully submitted this 15th day of November, 2000:

Suzánne Brownless, Esq. Suzanne Brownless, P.A. 1311-B Paul Russell Road Suite 201 Tallahassee, Florida 32301 Phone: (850) 877-5200 FAX: (850) 8878-0090

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Panda Energy International Inc.'s Brief was provided by U.S. Mail to all parties listed below and also by (*) Hand Delivery as indicated on this 15th day of November, 2000:

Gary L. Sasso, Esq. James Michael Walls Carlton Fields Law Firm One Progress Plaza, Suite 2300 200 Central Avenue St. Petersburg, FL 33701 FAX: (727) 822-3768

(*) Deboarh D. Hart, Esq. Katrina D. Walker, Esq. Florida Public Service Comm. 2540 Shumard Oak Blvd. Tallahassee, Florida 32399-0850 Robert A. Glenn, Esq. Director, Regulatory Counsel Group Florida Power Corporation One Progress Plaza, Suite 1500 200 Central Avenue St. Petersburg, Florida 33701 FAX: (727) 820-5519

Suzathe Brownless, Esq. Suzanne Brownless, P.A. 1311-B Paul Russell Road Suite 201 Tallahassee, Florida 32301 Phone: (850) 877-5200 FAX: (850) 8878-0090

Attorney for Panda Energy International, Inc.

c: 3262

-38-