BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for

determination of need for power plant in Duval County by JEA.

DOCKET NO. 001703-EM

ORDER NO. PSC-01-0342-PHO-EM

ISSUED: February 7, 2001

Pursuant to Notice and in accordance with Rule 28-106.209, Florida Administrative Code, a Prehearing Conference was held on January 25, 2001, in Tallahassee, Florida, before Commissioner Lila A. Jaber, as Prehearing Officer.

APPEARANCES:

RICHARD D. MELSON, ESQUIRE, 123 South Calhoun Street, Tallahassee, Florida 32314 On behalf of JEA.

DEBORAH D. HART, ESQUIRE, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850
On behalf of the Commission Staff (Staff).

PREHEARING ORDER

I. CONDUCT OF PROCEEDINGS

Pursuant to Rule 28-106.211, Florida Administrative Code, this Order is issued to prevent delay and to promote the just, speedy, and inexpensive determination of all aspects of this case.

The parties may make opening statements if they wish. Opening statements, if any, shall not exceed ten minutes.

At the Prehearing Conference, JEA requested that the Commission enter a bench decision on this matter. The Commission will rule on this motion at the conclusion of the hearing.

II. CASE BACKGROUND

Pursuant to Section 403.519, Florida Statutes, and Rules 25-22.080 and 25-22.081, Florida Administrative Code, on November 15,

OI719 FEB-75

2000, JEA petitioned for a determination of need for an electrical power plant to be located at the Brandy Branch Generating Station in Duval County, Florida. These proceedings are held to determine whether the proposed conversion of two of the combustion turbines currently being constructed at Brandy Branch to a combined cycle unit meets the need for electric system reliability and integrity, the need for adequate electricity at a reasonable cost, whether the proposed plant is the most cost-effective alternative available, whether there are any conservation measures which can mitigate the proposed power plant, and any other matters within the Commission's jurisdiction which it deems relevant, according to the requirements of Section 403.519, Florida Statutes.

III. PROCEDURE FOR HANDLING CONFIDENTIAL INFORMATION

- Any information provided pursuant to a discovery request for which proprietary confidential business information status is requested shall be treated by the Commission and the parties as confidential. The information shall be exempt from Section 119.07(1), Florida Statutes, pending a formal ruling on such request by the Commission, or upon the return of the information to the person providing the information. If no determination of confidentiality has been made and the information has not been used in the proceeding, it shall be returned expeditiously to the person providing the information. If a determination of confidentiality has been made and the information was not entered into the record of the proceeding, it shall be returned to the person providing the information within the time periods set forth in Section 366.093, Florida Statutes.
- B. It is the policy of the Florida Public Service Commission that all Commission hearings be open to the public at all times. The Commission also recognizes its obligation pursuant to Section 366.093, Florida Statutes, to protect proprietary confidential business information from disclosure outside the proceeding.
- 1. Any party intending to utilize confidential documents at hearing for which no ruling has been made, must be prepared to

present their justifications at hearing, so that a ruling can be made at hearing.

- 2. In the event it becomes necessary to use confidential information during the hearing, the following procedures will be observed:
 - a) Any party wishing to use any proprietary confidential business information, as that term is defined in Section 366.093, Florida Statutes, shall notify the Prehearing Officer and all parties of record by the time of the Prehearing Conference, or if not known at that time, no later than seven (7) days prior to the beginning of the hearing. The notice shall include a procedure to assure that the confidential nature of the information is preserved as required by statute.
 - b) Failure of any party to comply with 1) above shall be grounds to deny the party the opportunity to present evidence which is proprietary confidential business information.
 - c) When confidential information is used in the hearing, parties must have copies for the Commissioners, necessary staff, and the Court Reporter, in envelopes clearly marked with the nature of the contents. Any party wishing to examine the confidential material that is not subject to an order granting confidentiality shall be provided a copy in the same fashion as provided to the Commissioners, subject to execution of any appropriate protective agreement with the owner of the material.
 - d) Counsel and witnesses are cautioned to avoid verbalizing confidential information in such a way that would compromise the confidential information. Therefore, confidential information should be

presented by written exhibit when reasonably possible to do so.

e) At the conclusion of that portion of the hearing that involves confidential information, all copies of confidential exhibits shall be returned to the proffering party. If a confidential exhibit has been admitted into evidence, the copy provided to the Court Reporter shall be retained in the Division of Records and Reporting's confidential files.

IV. POST-HEARING PROCEDURES

Each party shall file a post-hearing statement of issues and positions. A summary of each position of no more than 50 words, set off with asterisks, shall be included in that statement. If a party's position has not changed since the issuance of the prehearing order, the post-hearing statement may simply restate the prehearing position; however, if the prehearing position is longer than 50 words, it must be reduced to no more than 50 words. If a party fails to file a post-hearing statement, that party shall have waived all issues and may be dismissed from the proceeding.

Pursuant to Rule 28-106.215, Florida Administrative Code, a party's proposed findings of fact and conclusions of law, if any, statement of issues and positions, and brief, shall together total no more than 60 pages, and shall be filed at the same time.

V. PREFILED TESTIMONY AND EXHIBITS; WITNESSES

Testimony of all witnesses to be sponsored by the parties has been prefiled. All testimony which has been prefiled in this case will be inserted into the record as though read after the witness has taken the stand and affirmed the correctness of the testimony and associated exhibits. All testimony remains subject to appropriate objections. Each witness will have the opportunity to orally summarize his or her testimony at the time he or she takes the stand. Oral summaries shall be limited to five minutes;

provided, however, that if Randy Boswell is called to testify, he may have ten minutes to summarize his testimony and JEA's counsel will forego an opening statement. Upon insertion of a witness' testimony, exhibits appended thereto may be marked for identification. After all parties and Staff have had the opportunity to object and cross-examine, the exhibit may be moved into the record. All other exhibits may be similarly identified and entered into the record at the appropriate time during the hearing.

Witnesses are reminded that, on cross-examination, responses to questions calling for a simple yes or no answer shall be so answered first, after which the witness may explain his or her answer.

The Commission frequently administers the testimonial oath to more than one witness at a time. Therefore, when a witness takes the stand to testify, the attorney calling the witness is directed to ask the witness to affirm whether he or she has been sworn.

VI. ORDER OF WITNESSES

As a result of discussions at the prehearing conference, each witness whose name is preceded by an asterisk (*) has been excused from this hearing. The testimony of excused witnesses will be inserted into the record as though read, and all exhibits submitted with those witnesses' testimony shall be identified as shown in Section IX of this Prehearing Order and be admitted into the record.

<u>Witness</u>		Proffered By	<u>Issues #</u>				
	Direct						
	Randy Boswell	JEA	1,	2,	3,	5	
	*Chuck Bond	JEA	1,	2,	3,	4,	5
	*Mary Guyton-Baker	JEA	1,	2,	3,	5	

<u>Witness</u>	Proffered By	<u>Issues</u>	#
*Robert Reedy	JEA	3	
*Bret L. Griffin	JEA	3	
*John Henry David	JEA	3	
*Myron Rollins	JEA	1, 2, 3, 4,	5

Rebutta1

None

VII. BASIC POSITIONS

JEA:

JEA is seeking a determination of the need for the Brandy Branch Combined Cycle Conversion Project ("Brandy Branch Conversion") which will add 197 MW of steam generating capacity at its Brandy Branch site with a planned commercial operation date of June 2004. JEA's studies show that the Brandy Branch Conversion is the most costeffective alternative to meet its need for additional capacity in 2004. Over a 20-year planning horizon, JEA's preferred plan beginning with the Brandy Branch Conversion is over \$17 million (cumulative PWRR) less costly than a plan that begins with any other generating unit addition.

JEA currently has three simple cycle combustion turbines under construction at the Brandy Branch site. These combustion turbines are GE advanced (FA) units with nominal output of approximately 173 MW each. All three of these units are scheduled to be completed during calendar year 2001. These units will be fired primarily by natural gas, with No. 2 oil as a back-up fuel.

In order to increase its electric power generating capability, JEA is proposing to convert two of the Brandy Branch simple cycle units into a combined cycle unit. The conversion will be accomplished by adding two heat recovery steam generators (HRSGs) and one 197 MW steam turbine generator to the existing equipment. One HRSG will be added to each of the two combustion turbines and the steam turbine generator will be shared by the two HRSGs. This conversion will create a 2 x 1 combined cycle unit and leave one simple cycle combustion turbine at the site.

JEA needs additional capacity in 2004 in order to maintain a 15 percent reserve margin. This is the reliability planning criteria that JEA uses to ensure that it maintains the reliability and integrity of its electric system. In addition, the Brandy Branch Conversion will assist in maintaining the reliability and integrity of the Peninsular Florida system by contributing additional needed generating resources to support the Peninsula's target 15 percent reserve margin.

The Brandy Branch Conversion project will provide reliable generation to JEA at a reasonable cost. Because the combined cycle technology is a highly efficient technology that uses waste heat to create steam and produce additional electricity, the Brandy Branch Conversion will enable JEA to add 197 MW of capacity to its system without burning additional gas to generate the additional 197 MW.

In concluding that the Brandy Branch Conversion is the most cost-effective alternative available, JEA studied numerous supply-side and demand-side options. Cost and performance estimates were developed for a wide range of potential generating technologies, including conventional, advanced, nuclear, energy storage systems, and renewable and waste energy resources. The most promising of these technologies were modeled in EGEAS,

which produced cost information for the 200 least cost plans for meeting JEA's capacity needs. This analysis showed that the Brandy Branch Conversion provides \$17 million in present worth revenue requirement savings over 20 years compared to the best alternative other than the Brandy Branch Conversion. JEA also performed a number of sensitivity analyses in which key assumptions were changed (e.g. high and low fuel price forecast; high and low load forecast, etc.). These sensitivity analyses show that the plan beginning with the Brandy Branch Conversion is very robust, and performs well under a wide range of future scenarios.

JEA also considered the availability of demand side measures, and determined that there are no cost-effective conservation or DSM measures available to it that would avoid or defer the need for the Brandy Branch Conversion.

In addition to being the lowest cost alternative, additional strategic considerations support the costeffectiveness of the Brandy Branch Conversion as JEA's next generating addition. Even with the Brandy Branch JEA will continue to be significantly Conversion, dependent on solid fuel to meet its generating requirements. The addition of efficient natural gas fired units provides a needed measure of fuel diversity to JEA's system. Ownership by JEA of the generating capacity enables JEA to maximize operating flexibility by dispatching the units as needed, scheduling maintenance when it best meets JEA's system needs, and taking other steps that increase the value of the capacity. locating the additional capacity on JEA's transmission system close to the load, the risk of transmission curtailment or interruption is practically eliminated. In addition, the use of an existing site minimizes environmental impacts. The low level of emissions from the Brandy Branch Conversion gives some protection from the risk of future environmental regulations. the conversion provides additional capacity without

burning additional fuel, it enables JEA to reduce overall emissions by displacing energy that would otherwise be generated by less efficient units with higher emission rates.

Timing for the Brandy Branch Conversion is critical. The use of an existing site minimizes environmental impacts and reduces the time and effort required for licensing. Because infrastructure such as transmission interconnections and a natural gas pipeline are already in place at Brandy Branch, JEA not only avoids the cost of those facilities, but also eliminates the time that would be required to extend such facilities to a greenfield site. Also, since the combustion turbines are already on site at Brandy Branch, JEA avoids the delivery delays that would be associated with construction of similar capacity at a greenfield site. Furthermore, there are adverse economic effects if the unit is The estimated additional cost of a one-year delay in commercial operation is at least \$6.6 million.

Staff's positions are preliminary and based on materials filed by the parties and on discovery. The preliminary positions are offered to assist the parties in preparing for the hearing. Staff's final positions will be based upon all the evidence in the record and may differ from the preliminary positions stated herein.

VIII. ISSUES AND POSITIONS

ISSUE 1: Does the proposed conversion of the Brandy Branch combustion turbine units to combined cycle operation provide adequate electricity to JEA at a reasonable cost?

POSITIONS

<u>JEA</u>: Yes. The Brandy Branch Conversion will provide a reliable source of generation that is needed for JEA to maintain a 15% reserve margin in 2004. Because of the high efficiency of the combined cycle technology, this power will be generated at a reasonable cost. (Boswell, Bond, Guyton-Baker, Rollins)

STAFF: No position pending responses to Staff discovery and evidence adduced at hearing.

ISSUE 2: Does the proposed conversion of the Brandy Branch combustion turbine units to combined cycle operation contribute to the reliability and integrity of JEA's system?

POSITIONS:

JEA:
Yes. JEA's reserve margin is projected to fall below 15 percent in 2004 without the addition of new generating resources. The Brandy Branch Conversion will address this capacity shortfall and is based on proven steam technology that will provide a reliable source of power to both JEA and Peninsular Florida. The converted unit will be integrated into the electric system through existing transmission facilities and will have no adverse effect on the integrity of the grid. (Boswell, Bond, Guyton-Baker, Rollins)

STAFF: No position pending responses to Staff discovery and evidence adduced at hearing.

ISSUE 3: Is the proposed conversion of the Brandy Branch combustion turbine units to combined cycle operation the most cost-effective alternative available to JEA?

POSITIONS:

JEA:
Yes. The Brandy Branch Conversion with commercial operation in 2004, is the lowest cost option available to meet the 15 percent reserve margin criteria. On a net present worth revenue requirements basis, it is about \$17 million less costly than the next best alternative. JEA's review of sensitivity analyses and the consideration of strategic factors confirms that the Brandy Branch Conversion is the most cost-effective alternative available to JEA for meeting its 2004 need. (Boswell, Bond, Guyton-Baker, Reedy, Griffin, David, and Rollins)

<u>STAFF:</u> No position pending responses to Staff discovery and evidence adduced at hearing.

ISSUE 4: Are there any conservation or demand-side management alternatives reasonably available to JEA which would mitigate the need for the conversion of the Brandy Branch combustion turbine units to combined cycle operation?

POSITIONS:

JEA:

No. In the 2000 conversion goals docket, the Commission determined that there were no cost-effective conservation measures available to JEA and therefore did not establish goals for JEA. A separate analysis by Black & Veatch based on FPL's most cost-effective DSM programs confirms that there are no cost-effective measures that would be available to JEA to avoid or delay the need for the Brandy Branch Conversion. (Bond, Rollins)

STAFF: No position pending responses to Staff discovery and evidence adduced at hearing.

ISSUE 5: Should the Commission grant a determination of need for the conversion of the Brandy Branch combustion turbine units to combined cycle operation?

POSITIONS:

JEA: Yes. The Brandy Branch Conversion is the most costeffective option available to JEA in 2004 to meet the need for additional capacity. There are no costeffective conservation measures available and it is the lowest cost supply-side alternative available. It will improve reliability and integrity of JEA's system and Peninsular Florida. (Boswell, Bond, Guyton-Baker, Rollins)

STAFF: No position pending responses to Staff discovery and evidence adduced at hearing.

IX. EXHIBIT LIST

Witness	<u>Proffered</u> <u>By</u>	I.D. No.	<u>Description</u>
<u>Direct</u>	JEA	(Composite JEA-1)	Need for Power Application for JEA Brandy Branch Combined Cycle Conversion.
	JEA	(JEA-2)	Changes to JEA Need for Power Application.
Randy Boswell	JEA		(Composite JEA-1) Sections 1, 3, 15, 16
			(JEA-2) Changes to Sections 1 and 3

<u>Witness</u>	<u>Proffered</u> <u>By</u>	I.D. No.	<u>Description</u>
Chuck Bond	JEA		(Composite JEA-1) Sections 2, 8.1, 9, 10 and 17
			(JEA-2) Changes to Sections 2 and 9
Mary Guyton-Baker	JEA		(Composite JEA-1) Sections 13 and 14
			(JEA-2) Changes to Section 14
Bret L. Griffin	JEA		(Composite JEA-1) Section 7 and Appendix A
John Henry David	JEA		(Composite JEA-1) Section 6
Myron Rollins	JEA	-	(Composite JEA-1) Sections 4, 5, 8(except 8.1), 11, 12, 18 and 19
			(JEA-2) Changes to Table of Contents and Section 5
	Staff _		JEA's Responses to Interrogatories of Staff

Witness	<u>Proffered</u> <u>By</u>	I.D. No.	Description
	Staff		Any documents produced in response to Staff's Request for Production
	Staff		Affidavit of Publication of Notice in Florida Times-Union

Parties and Staff reserve the right to identify additional exhibits for the purpose of cross-examination.

X. PROPOSED STIPULATIONS

There are no proposed stipulations at this time.

XI. PENDING MOTIONS

There are no pending motions at this time.

XII. PENDING CONFIDENTIALITY MATTERS

There are no pending confidentiality matters at this time.

It is therefore,

ORDERED by Commissioner Lila A. Jaber, as Prehearing Officer, that this Prehearing Order shall govern the conduct of these proceedings as set forth above unless modified by the Commission.

By ORDER of Commissioner Lila A. Jaber, as Prehearing Officer, this <u>7th</u> day of <u>February</u>, <u>2001</u>.

Lila a. jæser

Commissioner and Prehearing Officer

(SEAL)

DDH

MOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

Any party adversely affected by this order, which is preliminary, procedural or intermediate in nature, may request: (1) reconsideration within 10 days pursuant to Rule 25-22.0376, Florida Administrative Code, if issued by a Prehearing Officer; (2) reconsideration within 15 days pursuant to Rule 25-22.060, Florida

Administrative Code, if issued by the Commission; or (3) judicial review by the Florida Supreme Court, in the case of an electric, gas or telephone utility, or the First District Court of Appeal, in the case of a water or wastewater utility. A motion for reconsideration shall be filed with the Director, Division of Records and Reporting, in the form prescribed by Rule 25-22.060, Florida Administrative Code. Judicial review of a preliminary, procedural or intermediate ruling or order is available if review of the final action will not provide an adequate remedy. Such review may be requested from the appropriate court, as described above, pursuant to Rule 9.100, Florida Rules of Appellate Procedure.