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January 16, 2001

BY HAND DELIVERY

Blanca Bayó
Director, Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399

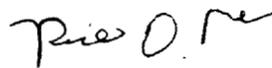
Re: JEA Need for Power -- Docket No. 001703-EM

Dear Ms. Bayó:

Enclosed for filing on behalf of JEA is the original and fifteen copies of its Prehearing Statement. Also enclosed is a diskette for your convenience.

If you have any questions about this filing, please call.

Very truly yours,



Richard D. Melson

RDM/mee
Enclosures

cc: Mr. Haff
Mr. Bond
Mr. Rollins
Mr. Groninger

DOCUMENT NUMBER-DATE

00620 JAN 16 2001

FPSC-RECORDS/REPORTING

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing was furnished to the following parties by Hand Delivery this 16th day of January, 2001.

Deborah Hart
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, Fl 32399

Phil D. [Signature]

Attorney

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of JEA to Determine Need)
for Proposed Electrical Power Plant in) Docket No. 001703-EM
Duval County, Florida, Consisting of the)
Conversion of Two of the Brandy Branch) Filed: January 16, 2001
Combustion Turbines Currently Under)
Construction to a Combined Cycle Unit)

JEA's PREHEARING STATEMENT

JEA hereby files its Prehearing Statement pursuant to the requirements of the Order Establishing Procedure (Order No. PSC-00-2394-PCO-EM) issued on December 14, 2000 in this docket.

A. Known Witnesses

JEA intends to present the testimony of the following witnesses:

<u>Witness</u>	<u>Testimony</u>	<u>Issues #</u>
Randy Boswell	Direct	1, 2, 3, 5
Chuck Bond	Direct	1, 2, 3, 4, 5
Mary Guyton-Baker	Direct	1, 2, 3, 5
Robert Reedy	Direct	3
Bret L. Griffin	Direct	3
John Henry David	Direct	3
Myron Rollins	Direct	1, 2, 3, 4, 5

B. Exhibits

JEA intends to introduce the following exhibits:

- JEA-1 Need for Power Application for JEA
 Brandy Branch Combined Cycle Conversion

- JEA-2 Changes to JEA Need for Power Application

As indicated in the following table, various JEA witnesses will sponsor the sections of the Need for Power Application (JEA-1) and changes (JEA-2) for which they are responsible:

Witness	Exhibit	Sections Sponsored
Randy Boswell	JEA-1	Sections 1, 3, 15, and 16
	JEA-2	Changes to Sections 1 and 3
Chuck Bond	JEA-1	Sections 2, 8.1, 9, 10, and 17
	JEA-2	Changes to Sections 2 and 9
Mary Guyton-Baker	JEA-1	Sections 13 and 14
	JEA-2	Changes to Section 14
Bret L. Griffin	JEA-1	Section 7 and Appendix A
John Henry David	JEA-1	Section 6
Myron Rollins	JEA-1	Sections 4, 5, 8, (except 8.1), 11, 12, 18, and 19
	JEA-2	Changes to Table of Contents and Section 5

JEA reserves the right to introduce additional exhibits for purposes of cross-examination.

C. JEA's Basic Position

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 cost-effective alternative available 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 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 cost-effectiveness of the Brandy Branch Conversion as JEA's next generating addition. Even with the Brandy Branch Conversion, JEA will continue to be significantly 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. By 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. Because 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 delayed. The estimated additional cost for a one-year delay in commercial operation is at least \$6.6 million.

D-F. Issues and Positions

JEA's position on the specific issues identified by the parties are as follows:

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

Position: 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)

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

Position: 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)

ISSUE 3: **Is the proposed conversion of the Brandy Branch combustion turbines to combined cycle the most cost effective alternative available to JEA?**

Position: 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)

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 turbines to combined cycle?**

Position: No. In the 2000 conservation 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)

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

Position: Yes. The Brandy Branch Conversion is the most cost-effective option available to JEA in 2004 to meet the need for additional capacity. There are no cost-effective 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)

G. Stipulations

JEA is not a party to any stipulations at this time.

H. Pending Motions

JEA does not have any pending motions at this time.

I. Requests for Confidentiality

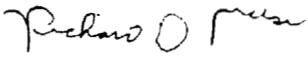
JEA has no pending requests for confidentiality at this time.

J. Compliance with Order No. PSC-00-2394-PCO-EM

JEA believes that it has complied with all requirements of Order No. PSC-00-2394-PCO-EM.

RESPECTFULLY SUBMITTED this 16th day of January, 2001.

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