



April 16, 1996

Mr. Clair Fancy, P.E.  
 Chief, Bureau of Air Regulation  
 Florida Department of Environmental Protection  
 2600 Blair Stone Road  
 Tallahassee, FL 32399-2400

APR 17 1996  
 BUREAU OF  
 AIR REGULATION

RECEIVED

Re: Osceola Power Limited Partnership Cogeneration Facility

Dear Mr. Fancy:

Osceola Power Limited Partnership was permitted to construct a 60 megawatt (MW) cogeneration facility in 1993 under air construction permit AC50-219795; PSD-FL-197. Construction of the facility began a short time later. The air construction permit was subsequently revised in September 1995 to incorporate certain changes in the facility design, including increasing the electrical generation capacity to 74 MW (AC50-269980; PSD-FL-197A). The facility began debugging tests in October 1995.

On behalf of Osceola Power, the purpose of this letter is to request an amendment of the construction permit as described below.

The Construction Permit

Specific Condition 17 of the amended PSD permit addresses simultaneous operation of the cogeneration facility boilers and the existing Osceola Farms sugar mill boilers. This condition allows the existing sugar mill boilers (Boiler Nos. 2, 3, 4, 5 and 6) to be retained for standby operation during the first three years of commercial operation of the cogeneration facility. During this three year period, the following conditions apply:

1. Simultaneous Operation of Cogen and Sugar Mill Boilers

- A. This period is limited to the time from initial firing to commercial operation of the cogeneration boilers, but shall not exceed a total duration of 12 months.
- B. Both cogeneration boilers can be operated simultaneously with the existing mill boilers.
- C. Only biomass or No. 2 fuel oil can be fired in the cogeneration boilers during such periods.
- D. Simultaneous operation is limited to 120 calendar days.

16102A/1

6241 Northwest 23rd Street  
 Suite 500  
 Gainesville, Florida 32653-1500  
 352-336-5600 FAX 352-336-6603

5405 West Cypress Street  
 Suite 215  
 Tampa, Florida 33607  
 813-287-1717 FAX 813-287-1716

1801 Clint Moore Road  
 Suite 105  
 Boca Raton, Florida 33487  
 407-994-9910 FAX 407-994-9393

7785 Baymeadows Way  
 Suite 105  
 Jacksonville, Florida 32256  
 904-739-5600 FAX 904-739-7777

1616 'P' Street NW  
 Suite 350  
 Washington, DC 20036  
 202-462-1100 FAX 202-462-2270



## 2. Standby Operation of the Existing Sugar Mill Boilers

- A. After the first year of cogeneration facility operations, the existing sugar mill boilers may only be operated when both cogeneration boilers are shutdown.
- B. The existing mill boilers must be permanently shutdown within three years of commercial startup of the cogeneration facility, but no later than January 1, 1999.

### Conditions During Initial Tests

The cogeneration facility first fired fuel in the two boilers in November 1995. From this time through early February 1996, the cogen facility was isolated from the sugar mill, while debugging and testing of the cogen facility was being conducted. Beginning in mid-February 1996 and continuing through March, connections were attempted between the cogen facility and sugar mill. However, these connection attempts were not successful. The sugar mill ended its crop season on March 21, 1996, and no further connections can be attempted until the next crop season which will begin around October 16, 1996.

Due to the technical problems in the startup of the cogen facility, and the unsuccessful attempts at connecting to the sugar mill during the 1995-1996 crop season, Osceola Power needs an extension in the length of time allowed in the construction permit for simultaneous operation of the cogen boilers and existing boilers.

During the 1995-1996 crop season, technical problems in the cogeneration plant, unrelated to connections with the sugar mill, hindered the performance of the cogeneration plant. Because of these problems, there was not enough time for connections with the sugar mill to be debugged. The impact and difficulty of using many fuel combinations in the cogeneration facility (i.e., wood chips, clean wood from C&D debris, bagasse, etc.) were underestimated. Osceola Power currently is trying to determine whether improvements or changes are needed in certain plant components. The use of bagasse fuel also has presented unanticipated problems with the new boilers and associated fuel feed systems.

The bagasse conveying and feeder system, and boiler performance when burning bagasse, can only be debugged during the crop season, when bagasse is available and the mill is consuming steam under actual operating conditions.

### Request for Extension of Time

Osceola Power has a significant incentive to successfully connect to the sugar mill in the shortest possible time. Operation of the existing sugar mill boilers, with associated manpower and operating costs, results in a significant economic penalty to the sugar mill. Continued technical difficulties in connecting with the sugar mill also result in economic penalties to the cogeneration facility. Therefore, Osceola Power will make every effort to limit the time needed for simultaneous operation of the cogen and sugar mill boilers.

However, Osceola Power cannot predict how quickly all of these technical problems can be resolved. It is estimated that during the next crop season, 25 to 30 connection trials may be needed to debug and



increase the reliability of the complete cogen-sugar mill system that will replace the existing sugar mill boiler operation. Osceola Power hopes to start and conclude these tests as expeditiously as possible, but cannot predict when these tests will be conducted during the Osceola crop season or how long they will take.

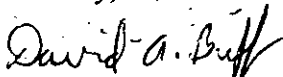
In the light of the problems it experienced this crop year, and to maintain flexibility for testing next crop year, Osceola Power is requesting that the time for simultaneous operation be extended through the next crop season (October 16, 1996 through April 1, 1997). During simultaneous operation, Osceola Power will continue to fire only biomass or No. 2 fuel oil. The cogen facility will continue to comply with all other provisions of the current construction permit. The sugar mill will comply with all of the applicable permit limits for its boilers.

Ambient and Other Impacts

The air quality impacts associated with simultaneous operation of the Osceola Power cogeneration boilers and the Osceola Farms sugar mill boilers were addressed in the previous air construction permit applications and permitting process. The impacts associated with simultaneous operation remain the same as previously presented. As previously noted, the simultaneous operation of the cogen facility and sugar mill will not cause or contribute to a violation of any ambient air quality standard or PSD increment. The current request only extends the time during which such impacts may occur.

Your prompt consideration of this request for a permit amendment is greatly appreciated. Enclosed is a check no. 19707, in the amount of \$250 to cover the Department's processing fee for this permit amendment. Please call me if you have any question concerning this request.

Sincerely,



David A. Buff, P.E.  
Principal Engineer

cc: Carlos Rionda  
Jorge Cabrera  
Bill Tarr  
Don Schaberg  
David Dee  
James Stormer  
Willard Hanks

DB/mlb

INVOICE NUMBER	DATE		VOUCHER NO.	AMOUNT
	4/16/96	Osceola Energy Permit		250.00

**KBN** Engineering and Applied Sciences, Inc.  
GENERAL DISBURSEMENT ACCOUNT  
PH. 904-336-5600  
6241 N.W. 23RD ST., SUITE 500  
GAINESVILLE, FL 32653-1500

First Union National Bank  
of Florida  
Gainesville, Florida 32605

63-2/630  
Branch 311

019707

April 16 1996

PAY \*\*\*\*\*250\*\*\*\*\* DOLLARS AND 00 CENTS \$\*250.00

TO THE ORDER OF FDEP

KBN ENGINEERING AND APPLIED SCIENCES, INC.

*David A. Buff*  
AUTHORIZED SIGNATURE

ON THE REVERSE SIDE OF THIS DOCUMENT INCLUDES AN ARTIFICIAL WATERMARK - HOLD AT AN ANGLE TO VIEW