

**Golder Associates Inc.**

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March 7, 2000

BUREAU OF AIR REGULATION

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Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Attention: Mr. A. A. Linero, P.E.

RE: REQUEST FOR ADDITIONAL INFORMATION  
DEP FILE NO. 0990331-008-AC (PSD-FL-197)  
OSCEOLA POWER L. P. - EXTENDED OPERATION OF SUGAR MILL BOILERS

Dear Mr. Linero:

Osceola Power Limited Partnership (OsPLP) has received the Department's letter dated October 21, 1999, regarding the request for an extension of time for the simultaneous operation of the OsPLP facility cogeneration boilers and the adjacent Osceola Farms Company's sugar mill boilers. Each of the Department's comments are responded to below, in the same order as they appear in the letter.

1. Section I of the Application for Air Permit-Long Form is attached (Attachment A), and includes the authorized representative certification and the professional engineer certification.
2. At the present time, no firm date can be established for restarting the OsPLP cogeneration boilers, and no firm date can be provided for the permanent shutdown and subsequent dismantling of the Osceola Farms sugar mill boilers. The primary obstacle to identifying this date is the pending litigation with Florida Power & Light Company (FPL) and the related bankruptcy proceeding. As explained in OsPLP's submittal to the Department dated September 28, 1999, the future of the OsPLP facility and its cogeneration boilers may be adversely affected by the outcome of these legal proceedings. Due to the uncertainty concerning the ultimate outcome of these legal proceedings, OsPLP cannot commit at this time to a firm date when the cogeneration boilers will be restarted or when the sugar mill boilers will be permanently shutdown and dismantled. After these legal proceedings are resolved, OsPLP will be able to make a final decision regarding the future of the cogeneration facility and the sugar mill boilers. The earliest possible date on which the cogeneration boilers could possibly restart would be later this year.

3. The cogeneration boilers have been shutdown since 1997. Due to this extended shutdown, additional effort and cost would be needed to bring the units back to operational status. This includes repairs and maintenance activities, as well as other work at the plant. Prior to restarting, the facility would need to be inspected to determine the components needing replacement, repair or refurbishment.

The primary impediment to finalizing the interconnection between the cogeneration boilers and the sugar mill was the lack of operating experience with the interconnection during the time that the cogeneration boilers were operating. The limited operations did not afford enough time to perfect the interconnection between the two facilities. For this reason, further simultaneous operation of the cogeneration boilers with the sugar mill boilers is requested. Similar to the existing PSD permit, the period of simultaneous operations would not exceed 90 calendar days over the first 12 months of cogeneration boiler operations after restart of the cogeneration facility.

When the cogeneration boilers were shutdown in 1997, they were effectively in compliance with all emission standards. Compliance testing was performed on wood waste in December 1996. The results are summarized in Table A attached (copy of excerpts from the stack test reports are also provided in Attachment B). The stack testing demonstrated compliance with all emission limits, except for lead and sulfuric acid mist. Since the time of the initial testing, the lead emission limit for wood waste firing has been revised, and as shown in the attached table, the results demonstrate compliance with the revised emission limit.

In the case of sulfuric acid mist (SAM) emissions, the reasons for the unexpectedly high emissions are believed to be due to interference with urea in the exhaust gas stream. At the Okeelanta Power facility, the initial testing for SAM was found to be biased high due to interference with urea (urea is injected into the boiler for NO<sub>x</sub> control). Further testing with a modified Method 8 train demonstrated compliance. It is noted that based on the Okeelanta Power testing, the test method for SAM has been revised to the modified Method 8. Also, SAM emissions testing is no longer required except during coal burning.

4. The Osceola Farms sugar mill boilers have been tested annually for many years. A summary of the last two compliance test results for each boiler is presented in Table B, attached. Based on these test results, the sugar mill boilers continue to be in compliance with all emission standards.
5. Based on the limited nature of any simultaneous operations in the future, as described in Response 3 above, there should be no concerns about compliance

with ambient standards or increments. A dispersion modeling analysis of simultaneous operations was performed in 1993 as part of the initial permitting of the cogeneration boilers (reference August 11, 1993 letter in Attachment C). This analysis demonstrated compliance with standards and increments for simultaneous operations.

6. The cogeneration facility was constructed and began operations as planned. The facility is now in cold shutdown for a prolonged period. This is not the same situation as if the facility were never constructed or operated. U.S. EPA incorporates provisions into its PSD rules (at 40 CFR 52.21(r)) regarding the obligation of a source to commence construction within 18 months of obtaining approval of a PSD permit. The Administrator may approve an extension of this time period based upon a satisfactory showing that an extension is justified. The purpose of this requirement is to prevent an entity from obtaining a PSD permit, and then waiting an extended time period before actually constructing the source (potentially due to BACT controls being too costly at the time). If the time delay was long (i.e., 3 to 5 years), the BACT technology may have advanced significantly. Without the source obligation requirement, the source could potentially install outdated technology.

OsPLP has constructed the source and operated it. There was no delay to avoid implementing the BACT imposed on the source. The source is currently in a cold shutdown mode, no different than many utility and industrial boilers have experienced. Cold shutdown provisions are explicitly contained in DEP Rule 62-210.300(2)(a)3. These rules allow cold shutdowns for up to 10 years duration without the need to repermit the unit.

OSPLP was subject to PSD and therefore BACT for SO<sub>2</sub>, beryllium and fluorides at the time of initial permitting. These pollutants were triggered for PSD due to permitting of coal as a fuel. Coal burning was very limited in the permit, and OsPLP has never burned coal and probably never will. There are no coal handling facilities at the site. Due to the limited coal burning allowed by the permit, and the use of low sulfur coal required by the permit, the BACT issued for SO<sub>2</sub>, beryllium and fluorides in the initial permit appears to be adequate by today's standards.

7. The sugar mill boilers have continued to operate normally during the period since the OsPLP shutdown in 1997. No significant changes have occurred in emission factors (i.e., emissions in terms of lb/MMBtu heat input) for the mill boilers, although actual emission vary from year to year based on stack testing. For the baseline emissions (1990-1991) as presented in the original application, total mill steam production averaged 1,961 million pounds of steam. Total mill steam production in 1997 was 1,638 million pounds, and in 1998 was 1,958

million pounds. Therefore, little change in operation or emissions from the mill have occurred since the 1990-1991 period.

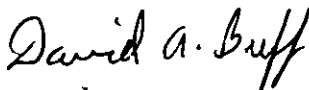
Osceola Farms is willing to implement the following additional measures on the sugar mill boilers in order to minimize pollutant emissions:

- Prior to the 2000/2001 sugarcane processing season, an oxygen flue gas monitor shall be installed on sugar mill Boiler Nos. 2, 4 and 5. The monitors will be operated and maintained to provide a measure of boiler combustion efficiency as feedback to the operator in order to minimize emissions of CO, PM and VOC. An alarm will be installed on each monitor that will sound any time that a boiler oxygen level drops below 2 percent or exceeds 12 percent. Whenever a boiler oxygen level falls outside this range, the boiler operator will take corrective action to bring the level back within this range as soon as possible, keeping with proper boiler operation.
- Any fuel oil burned in the sugar mill boilers will contain a sulfur content of no more than 1.0 percent.

The above described oxygen monitoring plan is already implemented on Boiler Nos. 3 and 6 at Osceola, as a condition of a previous PSD permit.

Thank you for consideration of this information. Please call if you have any questions or need further information."

Sincerely,  
Golder Associates Inc.



David A. Buff, P.E.  
Principal Engineer  
Florida P.E. #19011  
SEAL

DB/jkw  
Enclosures

cc: J. Koerner, BAR  
EPA  
NPS

cc: James Meriwether, OsPLP  
Phil Barbaccia, South District Office DEP  
James Stormer, Palm Beach County Health Department  
David Dee, Landers & Parsons  
Carlos Rionda, Osceola Farms Company  
Bill Tarr, Florida Crystals  
Jorge Cabrera, Osceola Farms Company

Table A. Comparison of Test Data vs. Emission Limits for Biomass, Osceola Power L.P.

Pollutant	Currently Permitted Emission Limit		Unit A Test Results		Unit B Test Results	
	(lb/MMBtu)	(lb/hr)	(lb/MMBtu)	(lb/hr)	(lb/MMBtu)	(lb/hr)
Particulate (TSP)	0.03	22.8	0.017	10.88	0.025	15.86
Particulate (PM10)	0.03	22.8	0.012	7.56	0.023	13.94
Sulfur Dioxide (24-hr)	0.10	76.0	0.027	18.4	0.023	15.2
Nitrogen Oxide, Annual avg	0.14 (a)	103.0	0.11	71.3	0.11	69.6
Carbon Monoxide, 24-hr avg	0.35	266.0	0.2	127.9	0.14	87.6
Volatile Organic Compounds (Woodwaste)	0.06 (b)	30.4	0.003	2.3	0.002	1.9
Lead (Woodwaste)	1.60E-04 (c)	0.12	6.02E-05	4.02E-02	1.34E-04	8.98E-02
Mercury (Woodwaste)	4.00E-06 (d)	0.0030	2.51E-06	1.63E-03	3.19E-06	1.86E-03
Beryllium	--	--	<4.86E-08	<3.14E-05	<4.58E-08	<3.105E-05
Fluorides	--	--	6.90E-04	0.4	7.12E-04	0.4
Sulfuric Acid Mist	0.005	3.72	0.02	13.6	0.041	27.8

- (a) Revised from original permit limit of 0.12 lb/MMBtu.  
 (b) Revised from original permit limit of 0.06 lb/MMBtu.  
 (c) Revised from original permit limit of 2.7 E-06 lb/MMBtu.  
 (d) Revised from original permit limit of 2.9E-05 lb/MMBtu.

Table B. Summary of Recent Tests Performed on Osceola Farms Boilers

Boiler	Test Date	No. of Runs	Steam Rate lb/hr	PM Emissions			NOx Emissions			VOC Emissions		
				Allowable (lb/MMBtu)	Actual (lb/hr)	Actual (lb/MMBtu)	Allowable (lb/MMBtu)	Actual (lb/hr)	Actual (lb/MMBtu)	Allowable (lb/MMBtu)	Actual (lb/hr)	Actual (lb/MMBtu)
2	1/14/99	6 <sup>a</sup>	128,640	--	--	--	0.45	54	0.21	1.5	3.49	0.014
2	2/19/99	6 <sup>a</sup>	124,533	0.2	37.2	0.15	--	--	--	--	--	--
2	11/17/99	6 <sup>a</sup>	137,067	0.2	46.9	0.17	0.45	--	0.14	1.5	--	0.22
3	11/19/99	3	133,674	0.2	49.3	0.187	--	--	--	--	--	--
3	11/20/99	3	131,087	0.2	30.6	0.12	--	--	--	--	--	--
4	11/10/97	3	123,000	0.3	39.2	0.17	--	--	--	--	--	--
4	11/10/99	3	135,423	0.3	38.7	0.15	0.45	40.4	0.16	1.5	--	0.06
4	11/18/98	3	125,077	0.3	60.7	0.26	0.45	--	0.23	1.5	--	0.14
5	1/11/99	6 <sup>a</sup>	137,667	--	--	--	0.45	63.9	0.23	1.5	3.2	0.012
5	2/17/99	6 <sup>a</sup>	137,400	0.2	39.8	0.15	--	--	--	--	--	--
5	11/8/99	6 <sup>a</sup>	134,400	0.2	44.3	0.17	0.45	--	0.22	1.5	--	0.02
6	1/7/99	3	153,300	0.15	41.1	0.138	--	--	--	--	--	--
6	11/12/99	3	149,167	0.15	39.8	0.136	--	--	--	--	--	--

<sup>a</sup> Boiler has two stacks. Three runs on each stack were performed.

**ATTACHMENT A**

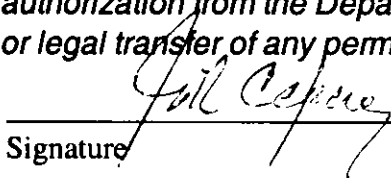
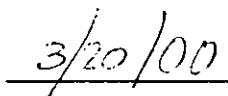
**AIR APPLICATION - LONG FORM  
(SECTION I)**

## DIVISION OF AIR RESOURCES MANAGEMENT APPLICATION FOR AIR PERMIT - LONG FORM

### Identification of Facility Addressed in This Application

1. Facility Owner/Company Name :		
Osceola Power L.P. and Osceola Farms		
2. Site Name :		
Osceola Power and Osceola Farms		
3. Facility Identification Number :		
0990331	[ ]	Unknown
4. Facility Location :		
Street Address or Other Locator :		
U.S. 98 and Hatton Highway		
City : Pahokee	County : Palm Beach	Zip Code : 33476
5. Relocatable Facility?		6. Existing Permitted Facility?
[ ] Yes    [X] No		[X] Yes    [ ] No

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official :	
Name :	Gus Cepero
Title :	Vice President
2. Owner or Authorized Representative or Responsible Official Mailing Address :	
Organization/Firm :	Osceola Power L.P.
Street Address :	P.O. Box 606
City :	Pahokee
State :	FL
Zip Code :	33476
3. Owner/Authorized Representative or Responsible Official Telephone Numbers :	
Telephone :	(561)996-9072
Fax :	
4. Owner/Authorized Representative or Responsible Official Statement :	
<p><i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.</i></p>	
Signature	Date
	

\* Attach letter of authorization if not currently on file.

**Scope of Application**

<b>Emissions Unit ID</b>	<b>Description of Emissions Unit</b>	<b>Permit Type</b>
002	Mill Boiler No. 2	
003	Mill Boiler No. 3	
004	Mill Boiler No. 4	
005	Mill Boiler No. 5	
006	Mill Boiler No. 6	
030	Cogen Boiler No.1	
031	Cogen Boiler No.2	
032	Fugitive Emissions from Biomass/Coal/Ash Handling at Cogen	
No Id	Sugar Mill and Boiling House	
No Id	Facility-wide Unregulated Emissions	

**Purpose of Application and Category**

Category I : All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain :

- [ ] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
  
- [ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

- [ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

- [ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

- [ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

- [ ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 2-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

- [ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

- [ ] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

- [ ] Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

- [ X ] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

I. Part 4 - 2

DEP Form No. 62-210.900(1) - Form  
Effective : 3-21-96

Current operation permit number(s), if any :

- ☐ Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

- ☐ Air construction permit for one or more existing, but unpermitted, emissions units.

**Application Processing Fee**

Check one :

☒ Attached - Amount : \$250.00      ☐ Not Applicable.

### **Construction/Modification Information**

1. Description of Proposed Project or Alterations :
Extension of time period for simultaneous operation of cogeneration and sugar mill boilers.
2. Projected or Actual Date of Commencement of Construction :
3. Projected Date of Completion of Construction :

## **Professional Engineer Certification**

1. Professional Engineer Name :	David A. Buff
Registration Number :	19011
2. Professional Engineer Mailing Address :	
Organization/Firm :	Golder Associates Inc.
Street Address :	6241 NW 23rd St., Suite 500
City :	Gainesville
State :	FL
Zip Code :	32653-1500
3. Professional Engineer Telephone Numbers :	
Telephone :	(352)336-5600
Fax :	(352)336-6603

4. Professional Engineer Statement :

*I, the undersigned, hereby certify, except as particularly noted herein\*, that :*

*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

*(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ☒ ] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*

*David A. Buff*  
\_\_\_\_\_  
Signature  
(seal)

*3/7/00*  
\_\_\_\_\_  
Date

\* Attach any exception to certification statement.

### **Application Contact**

**1. Name and Title of Application Contact :**

Name : Gus Cepero  
Title : Vice President

**2. Application Contact Mailing Address :**

Organization/Firm : Osceola Power L.P.  
Street Address : P.O. Box 606  
City : Pahokee  
State : FL                      Zip Code : 33476

**3. Application Contact Telephone Numbers :**

Telephone : (561)996-9072                      Fax :

### **Application Comment**

**ATTACHMENT B**

**OSCEOLA POWER INITIAL COMPLIANCE TEST RESULTS**

**Bechtel Power Corporation / Okeelanta Cogeneration  
Final Report - Unit A Compliance**

**1.0 COMPENDIUM (cont.)**

**TABLE 1-1  
POLLUTANTS AND TEST METHODOLOGIES**

Pollutant	Test Method	Run Duration
Particulate Matter	EPA 5	120 min.
PM10	EPA 201A	120 min.
Sulfuric Acid Mist	EPA 8	60 min.
Sulfur Dioxide	EPA 8	60 min.
Trace Metals (As, Ba, Cr, Cu, Pb, Hg)	EPA 29	120 min.
Fluorides	EPA 13B	60 min.
Nitrogen Oxides	EPA 7E	60 min.
Carbon Monoxide	EPA 10	60 min.
Volatile Organic Compounds	EPA 18	60 min.
Visible Emissions	EPA 9	60 min.
Oxygen / Carbon Dioxide	EPA 3A	as required
Volumetric Flow / Moisture	EPA 1-4	as required

**TABLE 1-2  
FLORIDA DEP EMISSION LIMITS  
BIOMASS FUEL**

Pollutant	lb/MMBtu	lb/hr
Particulate (TSP)	0.03	22.8
PM10	0.03	22.8
Lead	2.7e-6	2e-3
Mercury	2.9e-7	2.2e-4
Sulfuric Acid	0.005	3.72
Sulfur Dioxide (24-hr. avg.)	0.10	76.0
Nitrogen Oxides (annual avg.)	0.12	88.2
Carbon Monoxide (8-hr. avg.)	0.35	266.0
Volatile Organic Compounds	0.04	30.4
Visible Emissions	20 percent (6-min avg.)	



**Bechtel Power Corporation / Oscola Cogeneration  
Final Report -Unit A Compliance**

**1.0 COMPENDIUM (cont.)**

**TABLE I-3  
TRACE METALS TEST RESULTS - UNIT A**

Parameter	Unit	A M29-1	A M29-3	A M29-4	Average
Arsenic	mg/dscm @ 7%	8.67e-2	6.09e-2	3.73e-2	6.16e-2
	lb/MMBtu	7.83e-5	5.50e-5	3.37e-5	5.57e-5
	lb/hr	5.30e-2	3.49e-2	2.11e-2	3.63e-2
Beryllium	mg/dscm @ 7%	<5.04e-5	<5.45e-5	<5.64e-5	<5.38
	lb/MMBtu	<4.56e-8	<4.92e-8	<5.10e-8	<4.86e-8
	lb/hr	<3.09e-5	<3.12e-5	<3.20e-5	<3.14e-5
Chromium	mg/dscm @ 7%	1.44e-2	2.71e-2	9.84e-3	4.66e-2
	lb/MMBtu	1.31e-5	2.45e-5	8.90e-6	1.55e-5
	lb/hr	8.84e-3	1.55e-2	5.58e-3	9.97e-3
Copper	mg/dscm @ 7%	3.49e-2	3.02e-2	2.82e-2	3.11e-2
	lb/MMBtu	3.15e-5	2.73e-5	2.55e-5	2.81e-5
	lb/hr	2.13e-2	1.73e-2	1.60e-2	1.82e-2
Lead	mg/dscm @ 7%	7.80e-2 ✓	6.44e-2 ✓	6.35e-2 ✓	6.86e-2
	lb/MMBtu	7.04e-5	5.82e-5	5.74e-5	6.20e-5
	lb/hr	4.77e-2	3.69e-2	3.60e-2	4.02e-2
Mercury	mg/dscm @ 7%	3.12e-3 ✓	3.22e-3 ✓	2.00e-3 ✓	2.78e-3
	lb/MMBtu	2.82e-6	2.91e-6	1.81e-6	2.51e-6
	lb/hr	1.91e-3	1.84e-3	1.13e-3	1.63e-3

Test Date		15Dec96	15Dec96	15Dec96	
Test Time		0105-0318	0740-0955	1105-1312	
Gas Flow	acfm	262618	253923	248540	255027
Gas Flow	dscfm	147518	143270	140484	143757
Gas Moisture	percent	18.1	17.7	17.0	17.6
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	5.5 / 15.2	6.1 / 14.5	5.9 / 14.7	5.8 / 14.8
Gas Temperature	°F	313.8	315.3	319.1	316.1
Gas Velocity	ft/s	87.1	84.2	82.4	84.6

Note 1 - All concentrations (mg/dscm) are corrected to 7% O<sub>2</sub>



Bechtel Power Corporation / Ocoola Cogeneration  
Final Report - Unit A Compliance

1.0 COMPENDIUM (cont.)

TABLE 1-4  
PARTICULATE (TSP) TEST RESULTS - UNIT A

Parameter	Unit	MS-1	MS-2	MS-3	Average
Particulate (TSP)	gr/dscf @ 12%	0.012	0.005	0.007	0.008
	lb/MMBtu	0.024	0.011	0.016	0.017
	lb/hr	15.33	6.86	10.45	10.88
Test Date		14Dec96	14Dec96	15Dec96	
Test Time		1615-1828	1950-2222	1650-1856	
Gas Flow	acfm	267858	259998	250421	259426
Gas Flow	dscfm	148427	147545	138437	144803
Gas Moisture	percent	18.8	17.0	19.0	18.3
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	6.2 / 12.4	7.0 / 13.6	5.4 / 15.0	6.2 / 13.7
Gas Temperature	°F	317.9	316.6	317.2	317.2
Gas Velocity	f/s	88.8	86.2	83.0	86.0

Note 1 - Grains/dscf are corrected to 12% CO<sub>2</sub>.



**Bechtel Power Corporation / Osocola Cogeneration  
Final Report - Unit A Compliance**

**1.0 COMPENDIUM (cont.)**

**TABLE 1-5  
PM10 TEST RESULTS - UNIT A**

Parameter	Unit	14Dec96	14Dec96	15Dec96	Average
PM10	gr/dscf @ 7%	0.006	0.006	0.006	0.006
	lb/MMBtu	0.012	0.013	0.012	0.012
	lb/hr	7.56	7.79	7.33	7.56

Test Date		14Dec96	14Dec96	15Dec96	
Test Time		1615-1828	2007-2251	1420-1632	
Gas Flow	acfm	247988	250539	243860	247452
Gas Flow	dscfm	139784	141903	135656	139155
Gas Moisture	percent	17.7	17.5	18.5	17.9
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	6.2 / 12.4	7.0 / 13.6	5.3 / 15.1	6.2 / 13.7
Gas Temperature	°F	315.2	312.6	317.5	315.1
Gas Velocity	ft/s	82.2	83.1	80.9	82.1

Note 1 - Grains/dscf are corrected to 7% O<sub>2</sub>.



Bochtel Power Corporation / Osceola Cogeneration  
Final Report - Unit A Compliance

1.0 COMPENDIUM (cont.)

TABLE 1-6  
FLUORIDE TEST RESULTS - UNIT A

Parameters	Units	5A-13B-1	5A-13B-2	5A-13B-3	Average
Fluoride	ppmv	1.4	0.7	0.9	1.0
	lb/MMBtu	9.48e-4	4.67e-4	6.56e-4	6.90e-4
	lb/hr	0.6	0.3	0.4	0.4

Test Date		15Dec96	15Dec96	15Dec96	
Test Time		0105-0212	0310-0445	1005-1115	
Gas Flow	acfm	259006	260605	240237	253283
Gas Flow	dacfm	147819	146868	135697	143461
Gas Moisture	percent	17.1	17.9	17.9	17.6
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	5.5 / 15.1	5.4 / 15.2	6.1 / 14.5	5.7 / 14.9
Gas Temperature	°F	310.1	312.9	312.2	311.7
Gas Velocity	ft/s	85.9	86.4	79.7	84.0



**Bechtel Power Corporation / Oscicola Cogeneration  
Final Report - Unit A Compliance**

**1.0 COMPENDIUM (cont.)**

**TABLE 1-7  
SULFURIC ACID / SULFUR DIOXIDE TEST RESULTS - UNIT A**

Parameter	Units	AME-1	AME-2	AME-3	Average
Sulfuric Acid Mist	ppmv	5.8	10.0	3.3	6.37
	lb/MMBtu	0.018	0.031	0.010	0.020
	lb/hr	12.5	21.2	7.1	13.6
Sulfur Dioxide	ppmv	18.7	15.6	5.2	13.2
	lb/MMBtu	0.038	0.032	0.010	0.027
	lb/hr	26.5	21.5	7.3	18.4

Test Date		15Dec96	15Dec96	15Dec96	
Test Time		1205-1312	1405-1510	1620-1725	
Gas Flow	acfm	251857	247145	253952	250985
Gas Flow	dscfm	142395	138695	141281	140790
Gas Moisture	percent	17.4	17.3	17.9	17.5
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	5.9 / 14.7	5.8 / 14.8	5.3 / 15.1	5.7 / 14.9
Gas Temperature	°F	315.2	321.9	323.4	320.2
Gas Velocity	ft/s	83.5	82.0	84.2	83.2



Bechtel Power Corporation / Oscoda Cogeneration  
Final Report - Unit A Compliance

1.0 **COMPENDIUM** (cont.)

**TABLE 1-8**  
**CEMS TEST RESULTS - UNIT A**

Parameter	Unit	A-CEM-1	A-CEM-2	A-CEM-3	Average
Nitrogen Oxides	ppmv	71.1	62.3	71.3	68.2
	lb/MMBtu	0.11	0.11	0.12	0.11
	lb/hr	75.4	63.3	75.3	71.3
Carbon Monoxide	ppmv	223.2	168.6	209.6	200.5
	lb/MMBtu	0.22	0.18	0.21	0.20
	lb/hr	144.4	104.4	134.9	127.9
Volatile Organic Compounds (non-methane)	ppmv	5.94	5.12	5.06	5.37
	lb/MMBtu	0.003	0.003	0.003	0.003
	lb/hr	2.6	2.2	2.2	2.3

Test Date		14Dec96	14Dec96	14Dec96	
Test Time		1645-1745	1945-2110	2125-2225	
Gas Flow	wscfm	178112	170732	177470	175438
Gas Flow	dscfm	148427	142276	147892	146198
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	6.0 / 13.6	7.2 / 13.5	6.6 / 13.8	6.6 / 13.6

**TABLE 1-9**  
**VISIBLE EMISSION TEST RESULTS - UNIT A**

Parameter	A-M9-1	A-M9-2	A-M9-3	Average
Highest 6 Minute Average	5.8	5.6	5.6	5.7
1 Hour Average	5.5	5.3	5.4	5.4



**Bechtel Power Corporation / Osceola Cogeneration  
Final Report - Unit B Compliance**

**1.0 COMPENDIUM (cont.)**

**TABLE 1-1  
POLLUTANTS AND TEST METHODOLOGIES**

Pollutant	Test Method	Run Duration
Particulate Matter	EPA 5	120 min.
PM10	EPA 201A	120 min.
Sulfuric Acid Mist	EPA 8	60 min.
Sulfur Dioxide	EPA 8	60 min.
Trace Metals (As, Be, Cr, Cu, Pb, Hg)	EPA 29	120 min.
Fluorides	EPA 13B	60 min.
Nitrogen Oxides	EPA 7E	60 min.
Carbon Monoxide	EPA 10	60 min.
Volatile Organic Compounds	EPA 18	60 min.
Visible Emissions	EPA 9	60 min.
Oxygen / Carbon Dioxide	EPA 3A	as required
Volumetric Flow / Moisture	EPA 1-4	as required

**TABLE 1-2  
FLORIDA DEP EMISSION LIMITS  
BIOMASS FUEL**

Pollutant	Emission Limits	
Particulate (TSP)	0.03 lb/MMBtu	22.8 lb/hr
PM10	0.03 lb/MMBtu	22.8 lb/hr
Lead	2.7e-6 lb/MMBtu	2e-3 lb/hr
Mercury	2.9e-7 lb/MMBtu	2.2e-4 lb/hr
Sulfuric Acid	0.005 lb/MMBtu	3.72 lb/hr
Sulfur Dioxide (24-hr. avg.)	0.10 lb/MMBtu	76.0 lb/hr
Nitrogen Oxides (annual avg.)	0.12 lb/MMBtu	88.2 lb/hr
Carbon Monoxide (8-hr. avg.)	0.35 lb/MMBtu	266.0 lb/hr
Volatile Organic Compounds	0.04 lb/MMBtu	30.4 lb/hr
Visible Emissions	20 percent (6-min avg.)	



**Bechtel Power Corporation / Osceola Cogeneration  
Final Report - Unit B Compliance**

**1.0 COMPENDIUM (cont.)**

**TABLE 1-3  
TRACE METALS TEST RESULTS - UNIT B**

Parameters	Units	R-M29-1	R-M29-2	R-M29-3	Average
Arsenic	mg/dscm @ 7%	8.73e-2	1.11e-1	1.79e-1	1.26e-1
	lb/MMBtu	7.92e-5	1.02e-4	1.64e-4	1.14e-4
	lb/hr	5.24e-2	6.48e-2	1.12e-1	7.63e-2
Beryllium	mg/dscm @ 7%	<5.08e-5	<5.20e-5	<4.93e-5	<5.07e-5
	lb/MMBtu	<4.61e-8	<4.77e-8	<4.53e-8	<4.58e-8
	lb/hr	3.05e-5	<3.03e-5	<3.08e-5	<3.05e-5
Chromium	mg/dscm @ 7%	2.11e-2	2.63e-2	4.66e-2	3.13e-2
	lb/MMBtu	1.91e-5	2.42e-5	4.28e-5	2.83e-5
	lb/hr	1.26e-2	1.54e-2	2.92e-2	1.91e-2
Copper	mg/dscm @ 7%	5.36e-2	6.62e-2	1.05e-1	7.49e-2
	lb/MMBtu	4.92e-5	6.02e-5	9.63e-5	6.77e-5
	lb/hr	3.22e-2	3.86e-2	6.55e-2	4.54e-2
Lead	mg/dscm @ 7%	1.16e-1	1.32e-1	1.97e-1	1.48e-1
	lb/MMBtu	1.05e-4	1.22e-4	1.81e-4	1.34e-4
	lb/hr	6.93e-2	7.72e-2	1.23e-1	8.98e-2
Mercury	mg/dscm @ 7%	3.33e-3	3.69e-3	3.59e-3	3.54e-3
	lb/MMBtu	3.02e-6	3.39e-6	3.29e-6	3.19e-6
	lb/hr	1.20e-3	2.15e-3	2.24e-3	1.86e-3

Test Date		17Dec96	18Dec96	18Dec96	
Test Time		2155-2359	0055-0259	0400-0608	
Gas Flow	acfm	263470	253718	280829	266006
Gas Flow	dscfm	144474	139847	154792	146371
Gas Moisture	percent	20.3	19.8	19.8	20.0
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	5.5 / 15.1	5.4 / 15.2	5.9 / 14.6	5.6 / 15.0
Gas Temperature	°F	308.9	310.6	311.1	310.2
Gas Velocity	ft/s	87.4	84.1	93.1	88.2

Note 1 - All concentrations (mg/dscm) are corrected to 7% O<sub>2</sub>.



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Final Report - Unit B Compliance

**1.0 COMPENDIUM (cont.)**

**TABLE 1-4  
PARTICULATE (TSP) TEST RESULTS - UNIT B**

Parameter	Unit	B MS-1	B MS-2	B MS-3	Average
Particulate (TSP)	gr/dscf @ 12%	0.009	0.015	0.008	0.011
	lb/MMBtu	0.021	0.035	0.018	0.025
	lb/hr	13.29	22.92	11.38	15.86

Test Date		18Dec96	18Dec96	18Dec96	
Test Time		1005-1212	1345-1552	1645-1855	
Gas Flow	acfm	244216	258193	245478	249296
Gas Flow	dscfm	133840	138547	132637	135008
Gas Moisture	percent	20.2	22.1	21.3	21.2
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	5.0 / 15.5	4.7 / 15.8	5.5 / 14.7	5.1 / 15.3
Gas Temperature	°F	309.6	310.4	310.3	310.1
Gas Velocity	ft/s	81.0	85.6	81.4	82.7

Note 1 - Grains/dscf are corrected to 12% CO<sub>2</sub>.



Bechtel Power Corporation / Oscoda Cogeneration  
Final Report - Unit B Compliance

1.0 COMPENDIUM (cont.)

TABLE 1-5  
PM10 TEST RESULTS - UNIT B

Parameter	Units	B-M201-1	B-M201-2	B-M201-3	Average
PM10	gr dscf @ 7%	0.008	0.015	0.010	0.011
	lb/MMBtu	0.016	0.032	0.020	0.023
	lb/hr	9.74	20.49	11.58	13.94

Test Date		18Dec96	18Dec96	18Dec96	
Test Time		1029-1229	1345-1542	1645-1846	
Gas Flow	acfm	239494	241443	229290	236742
Gas Flow	dscfm	130763	135615	125601	130660
Gas Moisture	percent	21.3	19.1	20.6	20.3
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	5.0 / 15.5	4.7 / 15.8	5.5 / 14.7	5.1 / 15.3
Gas Temperature	°F	305.1	304.8	309.0	306.3
Gas Velocity	ft/s	79.4	80.1	76.0	78.5

Note 1 - Grains/dscf are corrected to 7% O<sub>2</sub>.



**Bechtel Power Corporation / Oscoda Cogeneration  
Final Report - Unit B Compliance**

**1.0 COMPENDIUM (cont.)**

**TABLE 1-6  
FLUORIDE TEST RESULTS - UNIT B**

Parameter	Unit	17Dec96	18Dec96	18Dec96	Average
Fluoride	ppmv	1.1	1.0	1.0	1.0
	lb/MMBtu	7.68e-4	6.74e-4	6.95e-4	7.12e-4
	lb/hr	0.5	0.4	0.4	0.4

Test Date		17Dec96	18Dec96	18Dec96	
Test Time		2210-2321	0015-0123	0225-0338	
Gas Flow	acfm	260293	256091	258689	258358
Gas Flow	dscfm	144488	141773	145360	143874
Gas Moisture	percent	20.1	20.4	19.1	19.9
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	5.5 / 15.1	5.4 / 15.2	5.9 / 14.6	5.6 / 15.0
Gas Temperature	°F	302.0	301.4	302.4	301.9
Gas Velocity	ft/s	86.3	84.9	85.8	85.7



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Final Report - Unit B Compliance

1.0 COMPENDIUM (cont.)

TABLE 1-7  
SULFURIC ACID / SULFUR DIOXIDE TEST RESULTS - UNIT B

Parameter	Units	B-M8-1	B-M8-2	B-M8-3	Average
Sulfuric Acid Mist	ppmv	20.5	7.9	9.1	12.5
	lb/MMBtu	0.065	0.026	0.031	0.041
	lb/hr	45.2	17.1	18.7	27.0
Sulfur Dioxide	ppmv	4.4	25.9	1.8	10.7
	lb/MMBtu	0.009	0.056	0.004	0.023
	lb/hr	6.4	36.9	2.4	15.2

Test Date		18Dec96	18Dec96	18Dec96	
Test Time		0430-0540	0653-0755	0800-0907	
Gas Flow	acfm	264267	255196	251840	257101
Gas Flow	dscfm	144520	142693	134532	140582
Gas Moisture	percent	21.3	19.3	21.7	20.8
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	5.9 / 14.6	5.3 / 15.4	5.4 / 15.3	5.5 / 15.1
Gas Temperature	°F	301.8	304.7	316.1	307.5
Gas Velocity	ft/s	87.6	84.6	83.5	85.2



Bechtel Power Corporation / Osceola Cogeneration  
Final Report - Unit B Compliance

1.0 COMPENDIUM (cont.)

TABLE 1-8  
CEMS TEST RESULTS - UNIT B

Parameter	Units	B CEM-1	B CEM-2	B CEM-3	Average
Nitrogen Oxides	ppmv	72.3	70.0	63.3	68.5
	lb/MMBtu	0.11	0.11	0.10	0.11
	lb/hr	73.2	69.9	65.8	69.6
Carbon Monoxide	ppmv	113.6	169.8	141.7	141.7
	lb/MMBtu	0.11	0.16	0.14	0.14
	lb/hr	70.0	103.3	89.6	87.6
Volatile Organic Compounds (non-methane)	ppmv	5.00	3.77	4.13	4.30
	lb/MMBtu	0.003	0.002	0.002	0.002
	lb/hr	2.2	1.6	1.8	1.9

Test Date		18Dec96	18Dec96	18Dec96	
Test Time		0000-0100	0130-0230	0335-0435	
Gas Flow	wscfm	178145	174298	179716	177386
Gas Flow	dscfm	141774	139770	145360	142301
Gas O <sub>2</sub> /CO <sub>2</sub>	percent	5.2 / 15.6	5.4 / 15.3	5.9 / 14.7	5.5 / 15.2



## **ATTACHMENT C**

### **PREVIOUS SIMULTANEOUS OPERATIONS MODELING**



August 11, 1993

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

Re: Osceola Power Limited Partnership  
AC50-219795, PSD-FL-197

Dear Mr. Fancy:

In follow up to our meeting with Osceola Power on July 2, 1993, this correspondence presents additional comments on the permit documents issued June 3 for the above referenced facility. It is hoped this submittal resolves the few outstanding concerns over the draft permit, and the final permit can be issued in an expeditious manner.

**1) Operation of Cogeneration Boilers in Conjunction With Existing Osceola Boilers (Specific Condition 17)**

As described in the "Addendum For Osceola Power Limited Partnership" contained in the July 2 submittal to the Department, during initial startup of the cogeneration facility prior to commercial operation, it is possible the cogeneration boilers may be operated when the Osceola sugar mill boilers are also operating. This situation may arise when performance tests and debugging activities are conducted at the cogeneration facility.

It is expected that such operations will occur no more than 90 calendar days during the initial 12-months following cogeneration plant startup. This will not be a consecutive 90 day period, but will instead consist of intermittent periods of performance testing and debugging until commercial operation begins. During these 90 calendar days, only biomass or No. 2 fuel oil will be burned in the cogen boilers. Coal will not be burned during this period.

Simultaneous operation of the existing and new facilities will only occur during the crop season, because the existing Osceola sugar mill boilers do not operate during the seven-month off-season.

The testing of the cogeneration boilers prior to commercial operation will be performed in isolation (i.e., no steam being sent to the sugar mill) or in the cogeneration mode (i.e., with steam being sent to the sugar mill). When operating in isolation, the maximum short-term (i.e., 3-hour) steam load that can be accommodated totally within the cogeneration facility is both boilers operating at full load (854,800 lb/hr steam). On a 24-hour average basis, the maximum steam load will be limited to 495,000 lb/hr steam.

KBN ENGINEERING AND APPLIED SCIENCES, INC.

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In order to investigate the potential air quality impacts of this situation, air dispersion modeling of the cogen boilers for biomass burning conditions was performed (i.e., emissions and gas flow rate are different than under coal burning conditions). Emissions equivalent to two boilers at full load were modeled for the 1-, 3- and 8-hour averaging times, and emission equivalent to 495,000 lb/hr steam were modeled for the 24-hour and annual averaging times (refer to Table 1 attached). The results of this analysis are presented in Table 2. As shown, the maximum cogen facility impacts are all less than the air quality significant impact levels. This demonstrates that the cogen facility, when operated at or below these steam rates, will not contribute significantly to any existing air quality impacts (e.g., those due to the existing sugar mill boilers).

Class I PSD impacts were also analyzed for this case of simultaneous operation during the crop season. Presented in Table 3 are the predicted Class I impacts of the cogeneration boilers only burning biomass with 1) two boilers operating at full load for the 3-hour averaging time, and 2) with a total of 495,000 lb/hr steam for the 24-hour and annual averaging times. As shown, all impacts except the SO<sub>2</sub> 24-hour and 3-hour impacts are below the National Park Service significance levels. Therefore, simultaneous operation of the existing boilers and cogen boilers during the crop season will not cause or contribute to any PSD Class I increment violations for PM or NO<sub>x</sub> in the Class I area.

In the original Class I SO<sub>2</sub> modeling presented in the application, the existing boilers were modeled as offsets during the crop season. For the case of simultaneous operation, the existing boilers would not be shut down, and therefore would not provide offsets (refer to Table 4 for estimated current emissions from existing boilers). However, the cogen boilers were originally modeled at 100 percent coal firing, whereas during simultaneous operation (during the 90-day calendar period), the cogen boilers will only burn biomass or No. 2 fuel oil (biomass represents worst case emissions).

A comparison of the original basis of the Class I modeling and the potential case of simultaneous operation, for both Osceola and Okeelanta, is presented in Table 5. As shown, for Osceola the PSD baseline SO<sub>2</sub> emissions are 335.3 lb/hr. Future SO<sub>2</sub> emissions in the original modeling (with coal) were 1,104.0 lb/hr, whereas for simultaneous operation the SO<sub>2</sub> emissions (with biomass) will be 700.1 lb/hr, maximum 3-hour averaging time. Thus, SO<sub>2</sub> emissions during the proposed simultaneous operations are reduced by 403.9 lb/hr compared to the original modeling and therefore PSD Class I impacts should be reduced for this case.

The cogeneration facility may also be tested at times when the cogeneration plant is operated in the cogeneration mode. During this mode, steam will be sent from the cogen facility to the sugar mill, and the sugar mill boilers steam production will be reduced by an equal amount. Under these conditions, air emissions and air impacts due to the existing Osceola boilers will be reduced. For each lb of steam generated, emissions are higher from the existing boilers than from the cogen boilers. The calculation of maximum emissions from the existing boilers is presented in Table 4, and those for the cogen boilers are shown in Table 1. The comparison of emissions from the existing and cogen boilers is presented in Table 6.



In addition, the cogeneration stacks (180 ft) are higher than the existing boiler stacks (90 ft) and the cogeneration boiler exhaust gases (350°F) are of greater temperature than the existing boilers exhaust gases (150°F), and therefore the cogen boilers provide much greater dispersion of emissions. This demonstrates that any operation of the cogen boilers which sends steam to the sugar mill will only reduce total emissions and impacts.

Suggested wording for Specific Condition No. 17 which addresses this issue is provided below:

During the period beginning with initial firing of the cogeneration boilers and ending three years after commercial operation of the cogeneration facility, the existing Boilers Nos. 2, 3, 4, 5 and 6. (Permit Nos. AO50-203679, 165813, 203680, 165626, and 165814, respectively) may be retained for standby operation.

During the period from initial firing to commercial operation, both cogeneration boilers can be operated simultaneously with the existing boilers. Only biomass and No. 2 fuel oil may be used in the cogeneration boilers during this period. If more than 495,000 lb/hr steam (24-hour average) is generated in the cogeneration boilers, steam in excess of 495,000 lb/hr (24-hour average) must be sent to the Osceola sugar mill, and the existing boiler's steam production reduced by an equivalent amount. This period shall not exceed a total duration of 12 months. During this 12-month period, simultaneous operation of the existing boilers and the cogeneration boilers shall not occur on more than 90 calendar days.

During the three year period beginning with commercial operation of the cogeneration facility, the existing boilers may be operated only when both of the cogeneration boilers are shutdown.

During operation, the existing boilers must meet all requirements in the most recent construction and operation permits for the boilers. These boilers shall be shutdown and rendered incapable of operation within three (3) years of commercial startup of the cogeneration facility, but no later than January 1, 1999.

## **2) Restrictions on Treated Wood**

The DEP has requested information on the concentrations of arsenic, chromium, and copper which would exist in the wood waste stream if 2.4% treated wood were present, with chromate copper arsenate (CCA) used as the wood preservative. Presented in Table 7 are the calculations and the resulting concentrations. The calculations and assumptions are consistent with the information and emissions that have been presented in the permit application. As shown, a treated wood amount of 2.4% in the wood waste stream would result in the following average concentrations in the wood waste stream: 56.7 ppm for arsenic, 67.2 ppm for chromium, and 53.2 ppm for copper. As previously demonstrated, these levels in the wood waste would not result in violation of DEP's Acceptable Toxic Reference Concentrations.

Mr. Clair Fancy, P.E., Chief

August 11, 1993

Page 4



In the July 2, 1993, submittal to the Department, revised wording for Specific Condition No. 12 was presented. Osceola recommends this wording be incorporated into the final construction permit.

Thank you for your consideration of these comments. If you have any questions concerning these comments, please call me at 904-331-9000.

Sincerely,

David A. Buff, M.E., P.E.  
Principal Engineer

DB/ehj

cc: Gus Cepero, Okeelanta Corporation  
David Dee, Carlton-Fields  
Jewell Harper, EPA  
John Bunyak, NPS  
Bevin Beaudet, PBCHU  
Mark Carney, USGenCo  
Frank Garguilio, PBCHU  
File (2)

Table 1. Cogen Facility Emissions When Burning Biomass, Osceola Power

Boiler	Design Steam Rate Per Boiler (lb/hr)	Design Heat Input Per Boiler (MM Btu/hr)	Biomass Emission Factor (lb/MMBtu)				Biomass Emissions (lb/hr)							
							(lb/hr)				(lb/1000 lb steam)			
			SO2	NOx	PM	CO	SO2	NOx	PM	CO	SO2	NOx	PM	CO
Maximum 3-Hour Load Case														
1	427,400	665	0.10	0.12	0.03	0.35	66.5	79.8	20.0	232.8	0.156	0.187	0.047	0.545
2	427,400	665	0.10	0.12	0.03	0.35	66.5	79.8	20.0	232.8	0.156	0.187	0.047	0.545
Total	854,800	1,330					133.0	159.6	39.9	465.5				
Maximum 24-Hour (495,000) lb/hr Steam Case														
1	427,400	665	0.10	0.12	0.03	0.35	66.5	79.8	20.0	232.8	0.156	0.187	0.047	0.545
2	67,600	105	0.10	0.12	0.03	0.35	10.5	12.6	3.2	36.8	0.156	0.187	0.047	0.545
Total	495,000	770					77.0	92.4	23.1	269.6				
OSCOGSIM														

Note: All figures derived from permit application.

OSCOGSIM  
8/07/93

Table 2. Osceola Cogeneration Facility Maximum Impacts for Simultaneous Operation.

Pollutant	SO2	NOx	CO	PM
<u>Emission Rate <sup>1</sup></u>				
1-hour, 3-hour, 8-hour (lb/hr)	133.0	--	465.5	--
1-hour, 3-hour, 8-hour (g/s)	16.76	--	58.65	--
24-hour and Annual (lb/hr)	77.0	92.4	269.6	23.1
24-hour and Annual (g/s)	9.70	11.64	33.97	2.91
<u>Maximum Impacts and Significance Levels <sup>2</sup></u>				
Annual Max Impact	0.25	0.30	--	0.07
Sig. Level	1.00	1.00	--	1.00
24-hour Max Impact	4.95	--	--	1.49
Sig. Level	5.0	--	--	5.0
8-hour Max Impact	--	--	45.9	--
Sig. Level	--	--	500	--
3-hour Max Impact	18.4	--	--	--
Sig. Level	25.0	--	--	--
1-hour Max Impact	--	--	100.7	--
Sig. Level	--	--	2,000	--

Notes:

<sup>1</sup> Burning biomass with emissions equivalent to two boilers at full load (854,800 lb/hr steam) for 3-hour averaging time and 495,000 lb/hr total steam rate for 24-hour and annual averaging time.

<sup>2</sup> Maximum impacts are based on cogeneration facility operating only during sugar mill season, October 1 through April 30. Impacts are the maximum refined impacts predicted using 1982 - 1986 meteorological data from West Palm Beach.  
Significance Levels are PSD Class II Significant Impact Levels.

Generic maximum impacts at 10 g/s:

Annual	0.25347
24-hour	5.10588
8-hour	7.8173
3-hour	11.0092
1-hour	17.1715

Table 3. Osceola Cogeneration Facility Maximum Impacts – Class I Impacts For Simultaneous Operation.

Pollutant	Emission Rate <sup>1</sup>			Maximum Impacts (ug/m <sup>3</sup> ) <sup>2</sup>			Nat'l Park Service Sig. Levels (ug/m <sup>3</sup> )		
	Averaging Time	(lb/hr)	(g/s)	Annual	24-hour	3-hour	Annual	24-hour	3-hour
SO <sub>2</sub>	3-hour	133.0	16.76	--	--	1.350	--	--	0.48
SO <sub>2</sub>	24-hour, Annual	77.0	9.70	0.007	0.180	--	0.03	0.07	--
NO <sub>x</sub>	Annual	92.4	11.64	0.008	--	--	0.025	--	--
PM	24-hour, Annual	23.1	2.91	0.002	0.054	--	0.1	0.33	--

Notes

<sup>1</sup> Burning biomass, with emissions equivalent to two boilers at full load (854,800 lb/hr steam) for 3-hour averaging time and 495,000 steam for 24-hour and annual averaging times.

<sup>2</sup> Based on cogeneration facility operating only during sugar mill crop season, 10/1 – 4/30.  
Impacts based on highest concentration predicted using 1982–86 meteorological data.

Generic Maximum Impacts at 10 g/s:

Annual	0.00672
24-hour	0.18541
3-hour	0.80563

Table 4. Existing Boiler Emissions, Osceola Sugar Mill

Table 4. Existing Boiler Emissions													
Boiler	Design Steam Rate (lb/hr)	Design Heat Input (MMBtu/hr)	Emissions										
			Fuel Oil		Bagasse		Emission Factor (lb/MMBtu)		Oil (lb/hr)	Bagasse+ (lb/hr)	Total (lb/hr)	Total (lb/MMBtu)	Total (lb/1000 lb steam)
			gal/hr	MMBtu/hr	MMBtu/hr	lb/hr(d)	Fuel Oil	Bagasse					
WORST CASE 24-HOUR SO <sub>2</sub> EMISSIONS													
2	140,000	272	117	17.6	254.4	31,805	2.62	0.125	46.1	31.8	77.9	0.286	0.56
3	150,000	292	0	0.0	292.0	36,500	--	0.125	0.0	36.5	36.5	0.125	0.24
4	140,000	272	117	17.6	254.4	31,805	2.62	0.125	46.1	31.8	77.9	0.286	0.56
5	165,000	321	264	39.6	281.4	35,173	2.62	0.125	103.9	35.2	139.1	0.433	0.84
6	195,000	379	502	75.4	303.6	37,951	2.62	0.125	197.7	38.0	235.7	0.622	1.21
Totals			1,536	1,000	150.1	1,385.9	173,235		393.8	173.2	567.0		
WORST CASE 24-HOUR NO <sub>x</sub> EMISSIONS													
2	140,000	272	117	17.6	254.4	31,805	0.446	0.235	7.8	59.8	67.6	0.249	0.48
3	150,000	292	0	0.0	292.0	36,500	--	0.16	0.0	46.7	46.7	0.160	0.31
4	140,000	272	117	17.6	254.4	31,805	0.446	0.235	7.8	59.8	67.6	0.249	0.48
5	165,000	321	264	39.6	281.4	35,173	0.446	0.235	17.7	66.1	83.8	0.261	0.51
6	195,000	379	502	75.4	303.6	37,951	0.400	0.16	30.2	48.6	78.7	0.208	0.40
Totals			1,536	1,000	150.1	1,385.9	173,235		63.5	281.0	344.5		
WORST CASE 24-HOUR PM EMISSIONS													
2	140,000	272	0	0.0	272.0	34,000	0.1	0.20	0.0	54.4	54.4	0.200	0.39
3	150,000	292	0	0.0	292.0	36,500	--	0.20	0.0	58.4	58.4	0.200	0.39
4	140,000	272	0	0.0	272.0	34,000	0.1	0.30	0.0	81.6	81.6	0.300	0.58
5	165,000	321	0	0.0	321.0	40,125	0.1	0.20	0.0	64.2	64.2	0.200	0.39
6	195,000	379	0	0.0	379.0	47,375	0.1	0.15	0.0	56.9	56.9	0.150	0.29
Totals			1,536	0	0.0	1,536.0	192,000		0.0	315.5	315.5		
WORST CASE 24-HOUR CO EMISSIONS													
2	140,000	272	0	0.0	272.0	34,000	0.033	3.625	0.0	986.0	986.0	3.625	7.04
3	150,000	292	0	0.0	292.0	36,500	--	3.625	0.0	1,058.5	1,058.5	3.625	7.06
4	140,000	272	0	0.0	272.0	34,000	0.033	3.625	0.0	986.0	986.0	3.625	7.04
5	165,000	321	0	0.0	321.0	40,125	0.033	3.625	0.0	1,163.6	1,163.6	3.625	7.05
6	195,000	379	0	0.0	379.0	47,375	0.033	3.625	0.0	1,373.9	1,373.9	3.625	7.05
Totals			1,536	0	0.0	1,536.0	192,000		0.0	5,568.0	5,568.0		

+ Assumes 50% SO<sub>2</sub> removal when burning bagasse.

Notes:

1 Permit Limit applied where more restrictive.

Notes: No 6 Fuel Oil- 18,300 Btu/lb NO<sub>x</sub> = 67 lb/1000 gal  
 8.2 lb/gal CO = 5 lb/1000 gal  
 2.4 % PM = 0.1 lb/MMBtu

Bagasse - 8,000 Btu/lb NO<sub>x</sub> = 0.235 lb/MMBtu  
 0.1% sulfur, max (dry) CO = 29 lb/ton (wet)  
 PM = 0.15, 0.2 or 0.3 lb/MMBtu

OSSIMUL  
 8/02/93

Table 5. SO<sub>2</sub> Emissions for Okeelanta and Osceola Used in PSD Class I Analysis

Source	Original Basis of Modeling		Simultaneous Operation of Existing/Cogen Boilers	
	Okeelanta (lb/hr)	Osceola (lb/hr)	Okeelanta (lb/hr)	Osceola (lb/hr)
	PSD Baseline		PSD Baseline	
Boiler 1	--	40.2	--	40.2
Boiler 2	--	129.5	--	129.5
Boiler 3	--	57.6	--	57.6
Boiler 4	86.9	108.0	86.9	108.0
Boiler 5	124.1	--	124.1	--
Boiler 6	124.1	--	124.1	--
Boiler 10	136.1	--	136.1	--
Boiler 11	133.3	--	133.3	--
Boiler 12	163.3	--	163.3	--
Boiler 14	159.0	--	159.0	--
Boiler 15	133.3	--	133.3	--
Boiler 16	--	--	--	--
Totals	1,060.1	335.3	1,060.1	335.3
	Future		Future	
Boiler 1	--	--	--	--
Boiler 2	--	--	--	77.9
Boiler 3	--	--	--	36.5
Boiler 4	--	--	86.9	77.9
Boiler 5	--	--	124.1	139.1
Boiler 6	--	--	124.1	235.7
Boiler 10	--	--	136.1	--
Boiler 11	--	--	133.3	--
Boiler 12	--	--	163.3	--
Boiler 14	--	--	159.0	--
Boiler 15	--	--	133.3	--
Boiler 16	--	--	--	--
Cogen Boilers	1,764.0 *	1,104.0 *	143.0 **	133.0 ***
Totals	1,764.0	1,104.0	1,203.1	700.1

\* Cogen facility boilers operating on 100% coal.

\*\* Cogen boilers operating on biomass and limited steam production.

\*\*\* Cogen boilers operating on biomass and at full load.

CLASS1CP  
8/09/93

Table 6. Comparison of Existing Boiler and Cogen Facility Emissions, Osceola

Pollutant	Existing Boilers*		Cogen Boilers (Biomass)	
	lb/MMBtu	lb/1000 lb steam	lb/MMBtu	lb/1000 lb steam
SO <sub>2</sub>	0.125	0.24	0.1	0.156
NO <sub>x</sub>	0.16	0.31	0.12	0.187
PM	0.15	0.27	0.03	0.047
CO	3.625	5.66	0.35	0.545

\* Lowest emission rate for any of the existing boilers.

EXCGOSCP  
8/02/93

Table 7. Concentration of Metals in Wood Waste at Osceola Power

---

WOOD WASTE PARAMETERS

-----  
 Total Biomass 823,529 tons  
 Total Wood waste 33%  
 Total Wood waste 271,765 tons

CLEAN WOOD WASTE PARAMETERS

-----  
 Total Clean Wood Waste 97%  
 263,612 tons

Arsenic content (1 ppm) 0.26 tons  
 Chromium content (3 ppm) 0.79 tons  
 Copper content (15 ppm) 3.95 tons

TREATED WOOD PARAMETERS

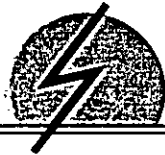
-----  
 Percent of total wood amount 2.4%  
 Total Treated Wood 6,522 tons  
 Treated wood density 26.3 lb/ft<sup>3</sup>  
  
 CCA in treated wood 0.47 lb/ft<sup>3</sup>  
 0.01787 lb CCA/lb treated wood  
  
 Total CCA in treated wood 116.6 tons  
  
 Total CCA components in treated wood  
     Arsenic (13%) 15.2 tons  
     Chromium (15%) 17.5 tons  
     Copper (9%) 10.5 tons

WOOD WASTE CONCENTRATIONS

-----  
 Total CCA components in wood waste  
     Arsenic 15.4 tons  
     Chromium 18.3 tons  
     Copper 14.4 tons  
  
     Arsenic 56.7 ppm  
     Chromium 67.2 ppm  
     Copper 53.2 ppm

---

OSCCA  
 8/11/93



OSCEOLA POWER

RECEIVED

MAR 06 2000

March 1, 2000

BUREAU OF AIR REGULATION

Mr. Jeffery F. Koerner, P.E.  
New Source Review Section  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Re: Osceola Power, L.P.--DEP File No. 0990331-008-AC (PSD-  
FL-197)

Dear Mr. Koerner:

On behalf of the Department of Environmental Protection, you recently sent a letter (dated January 31, 2000) to Mr. Carlos Rionda concerning the permit for Osceola Power Limited Partnership's cogeneration facility. I am sending you this response because your letter contains several statements that need to be clarified or corrected. My comments are organized in the same order as the statements in your letter.

First, your letter was addressed to Mr. Rionda as "V.P. and General Manager, Osceola Farms Co./Osceola Power, L.P." While Mr. Rionda is the Vice President and General Manager of Osceola Farms Company, he does not hold those positions with Osceola Power Limited Partnership (OPLP). Any correspondence to OPLP should be sent to me, as the Authorized Representative of OPLP. Further, I should also note that, for purposes of this letter, I am also authorized to make the statements below related to Osceola Farms Company. Although the cogeneration facility and the sugar mill are deemed by DEP to be one source for the purposes of DEP's Title V program, they are two separate facilities and they are currently owned by different entities.

The lawsuit filed by Florida Power & Light Company ("FPL") is currently in the discovery phase of the litigation. This case is presently scheduled to go to trial on September 5, 2000, and it is anticipated that the trial will last approximately five weeks. Even with this schedule, it is impossible to predict accurately how long it will take to resolve the FPL litigation, the related bankruptcy proceeding, or any appeals from these two

cases.

Although there are several reasons why OPLP and Osceola Farms would prefer to operate the cogeneration facility's boilers instead of the sugar mill's boilers, it should be remembered that the sugar mill boilers have been successfully operated for many years in compliance with all of the applicable state and federal standards that are designed to protect human health and the environment. If it continues to be necessary to operate the mill boilers, the mill boilers can be operated safely and in compliance with all applicable DEP ambient air quality standards.

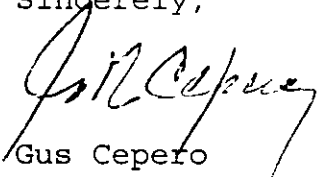
The PSD permit for the cogeneration facility was extended in the past to provide additional time for Osceola Farms and OPLP to perfect the interconnected operation of the two facilities. The extensions were not the result of "physical problems with the new cogeneration boilers." The most recent request for an extension of time has been necessitated by FPL's lawsuit, the related bankruptcy case, and the uncertainties created by those two legal proceedings.

Your letter indicates that a "complete shutdown of the cogeneration boilers to operate the sugar mill boilers would require substantially new permits" and "the applicant is advised to plan appropriately." OPLP does not wish to see, and currently does not expect, a permanent shutdown of the cogeneration boilers. However, OPLP cannot determine whether it will be economically feasible for the cogeneration facility to resume commercial operations until the FPL litigation and the bankruptcy proceeding are resolved. Further, I am not aware of any legal requirement that would compel Osceola Farms to obtain "substantially new permits" in the unlikely event that Osceola Farms must continue with its use of the sugar mill boilers, in lieu of receiving process steam from the cogeneration facility. Accordingly, I must respectfully disagree with your assertion that such permits would be necessary. Regardless of our respective opinions about this legal issue, it is unnecessary for us to answer this question (or any other hypothetical questions) at this time. It would be more appropriate to reserve such questions until we see how the FPL litigation and the bankruptcy proceeding unfold.

In the interim, please be assured that OPLP will continue to work cooperatively with the Department so that we can resolve our respective concerns in a mutually acceptable manner. OPLP and its consultants currently are preparing a written response to the Department's request for additional information. OPLP expects to

submit that information to the Department in the very near future.

Sincerely,



Gus Cepero

Authorized Representative for OPLP

cc: Clair Fancy, DEP

James Stormer, PBCHD

Gregg Worley, EPA

John Bunyak, NPS

Carlos Rionda, Osceola Farms Company

SD

Dee, LHP

Butt, Golder



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

January 31, 2000

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Carlos Rionda, V.P. and General Manager  
Osceola Farms Co. / Osceola Power L.P.  
P.O. Box 679  
Pahokee, FL 33476

Re: Request for Additional Information  
DEP File No. 0990331-008-AC (PSD-FL-197)  
Osceola Power L.P. - Extended Operation of Sugar Mill Boilers

Dear Mr. Rionda:

On October 21, 1999, the Department requested additional information regarding the request to extend operation of the sugar mill boilers. Your representatives, David Dee (Landers & Parsons) and David Buff (Golder Associates), requested and scheduled a meeting with the Department to provide some of this information and discuss the status of the cogeneration plant. The following briefly summarizes the items discussed during the meeting held on January 21, 2000:

1. Osceola Power indicated that little progress has been made with regard to the lawsuit with FPL.
2. Osceola Power has not operated the cogeneration boilers for more than 18 months and Osceola Farms continued to operate the sugar mill boilers during sugarcane season.
3. Osceola Power maintained that at least two more years of operating the sugar mill boilers might be needed due to the uncertain legal matters.
4. Golder Associates will finalize the additional information requested on October 21, 1999 and submit as soon as possible.
5. Both the Department and Osceola Power agreed that it is more environmentally beneficial to operate the cogeneration boilers instead of the sugar mill boilers.
6. The Department maintained that the original PSD permit required shutdown of the sugar mill boilers by the end of 1999. This has been extended several times due to physical problems with the new cogeneration boilers. The Department is hesitant to continue extensions beyond the intent of the original PSD permit, which was to establish commercial operation of the new cogeneration boilers.
7. The Department indicated that "permanent shutdown" of the sugar mill boilers was necessary due to the original net decreases used by Osceola Power to avoid BACT determinations for several pollutants. A future scenario of complete shutdown of the cogeneration boilers to operate the sugar mill boilers would require substantially new permits. The applicant is advised to plan appropriately.
8. This meeting concluded with an agreement that David Dee and David Buff would work together to revise the initial request in the form of suggested permit language for an extension to operate the sugar mill boilers. The Department would hold the application incomplete until the revised request is submitted. This would be the Department's last request for additional information.

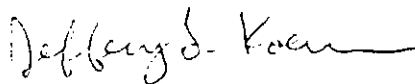
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Mr. Carlos Rionda, Osceola Farms Co. / Osceola Power L.P.  
Request for Additional Information  
January 31, 2000  
Page 2 of 2

The Department will resume processing your application after receipt of the requested information. Should your response to any of these items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. A new certification statement by the authorized representative or responsible official must also accompany any material changes to the application. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days. If you have any questions, please contact the project engineer, Jeff Koerner, at 850/414-7268.

Sincerely,



Jeffery F. Koerner, P.E.  
New Source Review Section

JFK

Enclosure

cc: David Dec, Landers & Parsons  
David Buff, Golder Associates  
James Meriwether, Osceola Power  
David Knowles, SD  
James Stormer, PBCHD  
Gregg Worley, EPA Region 4  
John Bunyak, NPS

Z 031 391 927

US Postal Service  
**Receipt for Certified Mail**  
 No Insurance Coverage Provided.  
 Do not use for International Mail (See reverse)

Sent to	Carlos Riorda
Street & Number	Oceola Farms
Post Office, State, & ZIP Code	Pahokee FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	Ext. Dper.
Return Receipt Showing to Whom & Date Delivered	Sugar MB
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	1-31-00
099031-008-AC P50-F1-197	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Carlos Riorda  
 Oceola Farms  
 PO Box 679  
 Pahokee, FL

33476

4a. Article Number

Z 031 391 927

4b. Service Type

- |   |   |
|---|---|
| <input type="checkbox"/> Registered                     | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail                   | <input type="checkbox"/> Insured              |
| <input type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD                  |

7. Date of Delivery

2-10-00

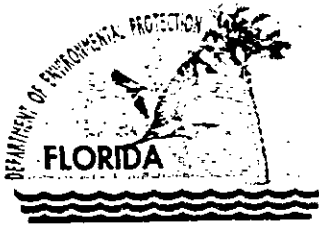
5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X *Howard Hill Jr.*

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

October 21, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David S. Dee  
Landers & Parsons, P.A.  
P.O. Box 271  
Tallahassee, FL 32301

Re: Request for Additional Information  
DEP File No. 0990331-008-AC (PSD-FL-197)  
Osceola Power L.P. - Extended Operation of Sugar Mill Boilers

Dear Mr. Dee:

On September 28, 1999, the Department received your request for a permit modification and \$250 fee on behalf of Osceola Power Limited Partnership. The request is to further extend simultaneous operation of the sugar mill boilers with the cogeneration boilers. The Department also received comments from the Palm Beach County Health Department on October 15, 1999 regarding this request. Originally, emissions of the sugar mill boilers were used to offset emissions from the new cogeneration project. Another extension of the operation of the sugar mill boilers could trigger additional PSD review. Based on the available information, the Department believes this issue is best resolved by adding a Compliance Plan to the Title V permit application currently under review by the Department's South District Office. The Compliance Plan should include a proposed schedule for ramping up the Osceola Power cogeneration plant to full operation as well as a new schedule for the shutdown and dismantling of the sugar mill boilers. The Department requests that Osceola Power withdraws this application to modify the PSD permit and submit a Compliance Plan as described above.

Alternatively, you may elect to proceed with this request, however the application is incomplete. In order to continue processing your request, the Department will need the additional information requested below.

1. Please submit at least the first six pages (Section I) of the Department's permit application, DEP Form No. 62-210.900(1), F.A.C., certified by the authorized representative and a Professional Engineer registered to practice in Florida.
2. Please provide a new construction schedule with milestones for ramping up the Osceola Power cogeneration facility to full operation. Similarly, provide a new schedule for the shutdown and dismantling of the sugar mill boilers.
3. Please describe the current functional status of the cogeneration boilers. Could the cogeneration boilers be fired today? What repairs or modifications might be necessary to bring these units back on line? If the cogeneration boilers are capable of firing now, why aren't they being used to supply steam to the existing sugar mill instead of the sugar mill boilers? What technical difficulties have prevented Osceola Power from finalizing the interconnected operations of the cogeneration plant and the sugar mill? When the cogeneration boilers were shutdown on September 14, 1997, were they in compliance with all emissions standards? When were the last compliance stack tests performed for

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Mr. David S. Dee  
Request for Additional Information – Osceola Power LP  
Page 2 of 2  
October 20, 1999

the cogeneration boilers? Please provide a summary of the compliance status for each regulated pollutant identifying the emissions, the emissions standard, and the method of compliance.

4. When were the last compliance tests conducted for each of the sugar mill boilers? Please provide a summary of the compliance status for each regulated pollutant identifying the emissions, the emissions standard, and the method of compliance.
5. Will simultaneous operation of the cogeneration boilers with the sugar mill boilers exceed any ambient air quality standards or PSD increments?
6. Due to the length of shutdown, the Department believes it may be necessary to demonstrate the adequacy of the original BACT determination and air quality analysis. Please comment.
7. Please provide a response to the Palm Beach County Health Department's letter dated October 15, 1999 (attached). As shown in the county's letter, the actual annual emissions from this project for several pollutants are not only greater than the potential emissions allowed by the PSD permit, but also greater than the PSD baseline actual emissions. Please provide additional information describing additional control and monitoring measures that could be implemented at both the cogeneration plant and the sugar mill to minimize pollutant emissions.

The Department will resume processing your application after receipt of the requested information. Should your response to any of these items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. A new certification statement by the authorized representative or responsible official must also accompany any material changes to the application. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days. If you have any questions, please contact the project engineer, Jeff Koerner, at 850/414-7268.

Sincerely,



A. A. Linero, P.E. Administrator  
New Source Review Section

AAL/jfk

Enclosure

cc: Mr. Gus Cepero, Osceola Power  
Mr. James Meriwether, Osceola Power  
Mr. Gregg Worley, EPA  
Mr. John Bunyak, NPS  
Phil Barbaccia, South District Office DEP  
James Stormer, Palm Beach County Health Department

PS Form 3800, April 1995

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PSD-F-1-197		TOTAL Postage & Fees		\$	
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Jeb Bush  
Governor

Robert G. Brooks, M.D.  
Secretary

October 15, 1999

RECEIVED

OCT 18 1999

Mr. Clair Fancy, P.E.  
Bureau Chief  
Bureau of Air regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Mail Station 5505  
Tallahassee, Florida 32399-2400

BUREAU OF AIR REGULATION

Re: Osceola Power Limited Partnership, FDEP File Nos. 0990331-007-AC & PSD-FL-197  
Okeelanta Power limited Partnership, FDEP File Nos. 0990332-010-AC & PSD-FL-196  
September 28, 1999 Requests for Extensions to Sugar Mill Boiler Shut Down Dates

Dear Mr. Fancy,

As you are aware, the above facilities were reviewed under the PSD regulations based on net emission increases below the significant levels for carbon monoxide (CO), oxides of nitrogen (NOx), particulate matter (PM) and volatile organic compounds (VOC). The actual emissions data for each facility are presented in Tables 1 and 2 for the past two years (1997 & 1998). As can be seen within the tables, emissions of CO, PM and VOC are significantly higher than the levels presented within the initial PSD applications. In addition, CO and VOC emissions for the period have been higher than the baselines.

Table 1, Osceola Facility

Pollutant	Baseline (TPY)	PSD Permit (TPY)	1997 (TPY)	1998 (TPY)
CO	5992.3	1225	6028	7467
NOx	437.8	436.5	494	345
PM	357.7	109.3	276	315
SO2	178.5	1071.5	248	275
VOC	208.6	210	459	244

Table 2, Okeelanta Facility

Pollutant	Baseline (TPY)	PSD Permit (TPY)	1997 (TPY)	1998 (TPY)
CO	10388	2012.5	10236	7415
NOx	888.7	862.5	757.13	620.41
PM	473.7	177.3	402.7	307.39
SO2	748.3	1700	219.8	206.1
VOC	401.9	345	802.13	656.84

Page 2 of 2  
Mr. Fancy  
October 12, 1999

The September 28, 1999 requests to amend Specific Condition No. 17 (SC #17) would allow this trend to continue for another 3 years if approved. Under the initial SC #17, operation of the cogen boilers was to be phased in over a 3-year period with the sugar mill boilers retained as standby units during this period. At the end of the 3-year period, the sugar mill boilers were to be shut down (Drop Date of 1/1/99). The focus of SC #17 was to allow operational flexibility and security to the sugar mills while ensuring that the netting analyses were federally enforceable. With the continued problems associated with the cogen facilities, it is not recommended that the Department amend the condition as requested.

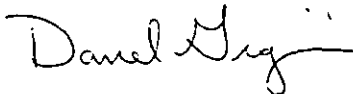
It is recommended that the Department amend SC #17 to allow use of the cogen boilers and existing boilers with an additional requirement to meet daily and annual facility wide emission caps. For your information, the facilities have requested a "Bubble" within the initial Title V permit applications. The daily and annual emission caps should be based on the information presented within the PSD permit applications for the cogen facilities. Emissions in excess of these levels should be addressed through the enforcement program with formal compliance plans required within each Title V operating permit. It is believed that this approach is consistent with the PSD and Title V programs.

Because the 3-year period following initial firing has passed, it is requested that as a minimum SC #17 be amended to require the maximum use of the cogen boilers to offset steam requirements at the sugar mills.

If you have any other questions, please contact me at (561) 355-3136.

Sincerely,

For the Division Director  
Environmental Health and Engineering



Darrel Graziani, PE  
Air Pollution Control Section

LANDERS & PARSONS, P.A.

ATTORNEYS AT LAW

DAVID S. DEE  
JOSEPH W. LANDERS, JR.  
JOHN T. LAVIA, III  
FRED A. MCCORMACK  
PHILIP S. PARSONS  
ROBERT SCHEFFEL WRIGHT

HOWELL L. FERGUSON  
OF COUNSEL

VICTORIA J. TSCHINKEL  
SENIOR CONSULTANT  
(NOT A MEMBER OF THE FLORIDA BAR)

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TALLAHASSEE, FL 32302-0271

310 WEST COLLEGE AVENUE  
TALLAHASSEE, FL 32301

TELEPHONE (850) 681-0311  
TELECOPY (850) 224-5595  
www.landersondparsons.com

September 28, 1999

Clair Fancy, P.E.  
Bureau Chief  
Bureau of Air Regulation  
Department of Environmental Protection  
2600 Blair Stone Road  
Mail Station 5505  
Tallahassee, Florida 32399-2400

RECEIVED  
SEP 28 1999  
BUREAU OF AIR REGULATION

Re: Osceola Power Limited Partnership  
DEP File No. 0990331-007-AC; PSD-FL-197

Dear Mr. Fancy:

0990331-008-AC

This law firm assists Osceola Power Limited Partnership ("Osceola Power") with various environmental law issues affecting the operations of Osceola Power's cogeneration facility ("Facility") in Palm Beach County, Florida. On behalf of Osceola Power, we hereby request the Department of Environmental Protection ("DEP") to grant an extension of time for the simultaneous operation of the Facility's boilers and the boilers at the adjacent sugar mill. Osceola Power wishes to amend Specific Condition 17 of the Facility's DEP permit (DEP File No. 0990331-007-AC; PSD-FL-197) in the manner shown below:

17. The existing Boilers Nos. 2, 3, 4, 5, and 6 (Permit Nos. A0 50-269980, 203679, 165813, 203680, 165626, and 165814, respectively) may be retained for standby operation ~~until the interconnections (bagasse fuel and steam systems) between the cogeneration facility and the sugar mill are commercially and operationally reliable, but no later than until April 1, 2000~~ 2002, provided their operating permits are valid.

During the period from initial firing through April 1, ~~2000~~ 2002, both cogeneration boilers can be operated simultaneously with the existing sugar mill boilers. Only biomass and No. 2 fuel oil may be used in the cogeneration boilers during this period. If more than 570,000 lb/hr steam (24-hour average) is generated in the cogeneration boilers, steam in excess of 570,000 lb/hr (24-hour average) must be sent to the Osceola sugar mill, and the existing sugar mill boilers' steam production

September 28, 1999

Page 2

reduced by an equivalent amount. After April 1, ~~2000~~2002, the cogeneration facility's boilers may be operated only when the sugar mill's boilers are shutdown or in the process of immediately shutting down. During operation, the existing sugar mill boilers must meet all requirements in the most recent construction and operation permits for the boilers. The existing sugar mill boilers shall be shutdown and rendered incapable of operation ~~when the interconnected operations are commercially and operationally reliable, but~~ no later than April 1, ~~2001~~ 2003.

#### Current Status of Operations

On May 14, 1997, Osceola Power filed a petition for relief under Chapter 11 of the U.S. Bankruptcy Code in the United States Bankruptcy Court for the Southern District of Florida. The Chapter 11 filing was precipitated, in large part, by a lawsuit filed by Florida Power & Light Company ("FPL") in which FPL claims it has no further obligations to Osceola Power under certain power purchase agreements. FPL has refused to make capacity payments to Osceola Power, thus causing a shortfall in Osceola Power's monthly cash receipts. On or about September 14, 1997, Osceola Power suspended operations at the Facility and shutdown the Facility's boilers.

As you know, the Florida Department of Environmental Protection issued a PSD permit to Osceola Power for the construction of the Facility, which was expected to replace the boilers used at Osceola Farms' sugar mill. DEP subsequently issued permit amendments that extended the timetable for the simultaneous operation of the Facility and the sugar mill's boilers until April 1, 2000, so that Osceola Power might connect, test, and fine tune the interconnected operation of the two facilities. To date, Osceola Power has only had limited opportunities to connect the two facilities and test interconnected operations.

It previously was anticipated that the 1997-1998 harvesting season would provide Osceola Power with adequate opportunities to complete the testing and fine tuning of the interconnected operations. However, the Facility did not operate during the 1997-98 or the 1998-99 harvest seasons. It currently appears that the Facility will not resume operations during the 1999-2000 harvest season, which will begin on or about October 4, 1999 and continue into March 2000.

#### Request for a Permit Amendment

In light of the FPL litigation and the bankruptcy case, Osceola Power cannot accurately predict when the Facility will resume operations. The trial in the FPL case will not occur until at least May, 2000, and may be followed by appeals or other legal proceedings. Even if all of the legal proceedings are resolved satisfactorily and the Facility resumes operations, additional time will be needed thereafter to test and fine tune the systems that are used during interconnected operations.

September 28, 1999

Page 3

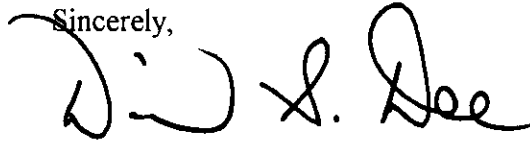
Since there may be significant delays before the Facility resumes operations and interconnected operations are perfected, Osceola Power requests DEP to extend Osceola Power's authorization to conduct interconnected operations through April 1, 2002. Osceola Power also requests the Department to extend the deadline for dismantling the boilers at the sugar mill until April 1, 2003. The boilers at the sugar mill must be allowed to operate, and cannot be dismantled, until the Facility has resumed normal operations and perfected the interconnected operations with the sugar mill.

Conclusion

Osceola Power would greatly appreciate DEP's prompt consideration of this request for a permit amendment. We have enclosed a check (No. 013673) in the amount of \$250 to pay the DEP fee for a permit amendment.

Please call me at (850) 681-0311 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "D. S. Dee". The signature is fluid and cursive, with the first name "D." and last name "Dee" clearly distinguishable.

David S. Dee

cc: Phil Barbaccia - DEP Ft. Myers  
James Stormer - HRS PBC

cc: J. Koerner, BAR  
EPA  
NPS

INVOICE	DESCRIPTION	DATE	P.O. NO.	GROSS AMT.	DISCOUNT	NET AMOUNT
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2099	PERMIT FEE	09/20/99		250.00	0.00	250.00
OSCEOLA CD-GEN						

FLORIDA CRYSTALS CORPORATION

<b>TOTALS</b>	250.00	0.00	250.00
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FLORIDA CRYSTALS CORPORATION  
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PALM BEACH, FLORIDA 33480-4099

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First Union National  
of Florida  
PENSACOLA, FL 32634

63-1012  
632

NO. 013673

DATE 09/22/99

13673

AMOUNT
\$ *****250.00

PAY

TWO HUNDRED FIFTY AND 00/100-----DOLLAR

TO  
THE  
ORDER  
OF

THE DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
SOUTH DISTRICT  
2295 VICTORIA AVENUE  
FORT MEYERS FL 33902-2549

*[Handwritten Signature]*

⑈013673⑈ ⑆063210125⑆ 2079940004247⑈

*0990331-008-AC*  
*Rec'd 9/28/99*