

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603



RECEIVED

February 19, 2002

FEB 21 2002

0137578

BUREAU OF AIR REGULATION

Palm Beach County Health Department
901 Evernia Street
West Palm Beach, FL 33401

Attention: Mr. A. J. Satyal

RE: OKEELANTA CORPORATION
BOILER NO. 16
CONTINUOUS NO_x AND OPACITY MONITORS
PERMIT NO. 0990005-009-AC; PSD-FL-169A

Dear Mr. Satyal:

On November 1, 2001, Okeelanta Corporation received air construction permit No. 0990005-009-AC; PSD-FL-169A, which authorized the modification of Boiler No. 16 to utilize natural gas as a fuel. This letter addresses issues concerning the existing continuous emission monitoring system (CEMS) for nitrogen oxides (NO_x) and the existing continuous opacity monitoring system (COMS). These are discussed below.

NO_x CEMS

Specific Condition No. 7.a of this permit sets forth requirements related to the allowable span of the continuous NO_x monitor installed on Boiler No. 16. This condition reads as follows:

- a. *Monitor Certification.* The NO_x CEMS shall: be certified in accordance with Performance Specification 2 in Appendix B of 40 CFR 60; comply with the monitoring requirements of 40 CFR 60.13; have dual span capability with a "low" span no greater than "0.18 pounds per mMBTU" (or equivalent) and a "high" span no greater than 0.60 pounds per mMBTU" (or equivalent); and comply with the quality assurance procedures in Appendix F of 40 CFR 60. The required RATA test shall be performed prior to the initial emissions compliance tests using EPA Method 7E of Appendix A in 40 CFR 60.

The purpose of this letter is to document the span levels that Okeelanta intends to utilize for the NO_x monitor to comply with this condition. After discussions with Jeff Koerner of FDEP Tallahassee, he suggested that Okeelanta inform you in writing of the proposed plan.

Okeelanta's NO_x monitor has four ranges: 0 to 10 ppm; 0 to 25 ppm; 0 to 100 ppm, and 0 to 250 ppm. For natural gas firing, the 24-hour block average NO_x limit for Boiler No. 16 is 0.10 lb/MMBtu. One-hour NO_x values greater than 0.18 lb/MMBtu are expected infrequently or not at all after completion of tuning the new burner and combustion control system. A NO_x emission rate of 0.18 lb/MMBtu due to natural gas firing for Boiler No. 16 is equivalent to approximately 75 to 140 ppm, depending on the oxygen content of the of the flue gases. Thus, Okeelanta intends to utilize the 0 to 100 ppm range on the analyzer when burning natural gas. Therefore, the span of the

instrument would be 0 to 100 ppm, and no greater than 0.18 lb/MMBtu. The instrument would be appropriately calibrated within this range of operation.

For No. 2 fuel oil firing, the 24-hour block average NO_x limit for Boiler No. 16 is 0.20 lb/MMBtu. One-hour NO_x values greater than 0.20 lb/MMBtu are expected infrequently, and values greater than 0.60 lb/MMBtu are not expected at all. A NO_x emission rate of 0.60 lb/MMBtu due to fuel oil firing for Boiler No. 16 is equivalent to approximately 230 to 450 ppm, depending on the oxygen content of the of the flue gases. Thus, Okeelanta intends to utilize the 0 to 250 ppm range on the analyzer when burning No. 2 fuel oil. NO_x values greater than 250 ppm are not expected when burning No. 2 fuel oil. Therefore, span of the instrument would be set at 0 to 250 ppm, and no greater than 0.60 lb/MMBtu. The instrument would be appropriately calibrated within this range of operation.

COMS

Okeelanta would also like to clarify the certification status of the existing COMS installed on Boiler No. 16. The original COMS was installed on the boiler in 1995. The COMS was tested and certified under the then existing 40 CFR 60 Appendix B - *Performance Specification 1* (PS-1). In August 2000, EPA issued revisions to PS-1. These revisions clarified the obligations of opacity monitor owners, operators and vendors; updated COMS design and performance requirements by incorporating reference ASTM D 6216-98; and provided equipment assurances for carrying out effective monitoring.

In the preamble to these changes, and in the revisions to PS-1, EPA made it clear that the rule was not intended to affect existing monitors, except under specific conditions. On page 48914 of the Federal Register, Vol. 65, No. 155, EPA states:

“These revisions do not change an affected facility’s applicable emission standards or requirements to monitor opacity.”....

“The revisions apply to any facility that is:

- (1) Required to install a new COMS, relocate an existing COMS, replace an existing COMS.
- (2) Required to recertify an existing COMS that has undergone substantial refurbishing (in the opinion of the enforcing agency).
- (3) Specifically required to recertify the COMS, as required in the Code of Federal Regulations”.

The actual rule language (PS-1, Section 1.2) states:

1.2 What COMS must comply with PS-1? If you are an owner or operator of a facility with a COMS as a result of this Part, then PS-1 applies to your COMS if one of the following is true:

- (1) Your facility has a new COMS installed after February 6, 2001; or
- (2) Your COMS has been replaced, relocated, or substantially refurbished (in the opinion of the regulatory authority) after February 6, 2001; or
- (3) Your COMS was installed before February 6, 2001, and is specifically required by regulatory action other than the promulgation of PS-1 to be to recertified.

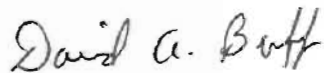
Based on these provisions and the fact that the existing COMS installed on Boiler No. 16 has previously been certified and replaced, relocated, or refurbished, it is our conclusion that the new PS-1 requirements do not apply to the COMS. Specific Condition No. 8 of the permit sets forth the

requirements for the COMS including the requirement that it must be certified in accordance with PS-1 of 40 CFR 60 Appendix B. Since the existing COMS was certified in accordance with PS-1 and the August 2001 revisions to the specification do not apply to the COMS for Boiler No. 16, we also conclude that Okeelanta has met the certification requirement of Specific Condition No. 8.

Please call me at (325) 336-5600, x 545, or Matt Capone at Okeelanta at (561)993-1658, if you have any questions or comments regarding this notification.

Sincerely,

GOLDER ASSOCIATES INC.



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

DB/nav

Enclosures

cc: M. Capone
J. Koerner

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NEW HOPE POWER PARTNERSHIP
OKEELANTA COGENERATION PLANT
P.O. BOX 9
8001 HWY 27 S.
SOUTH BAY, FLORIDA 33493
OFFICE (561) 993-1000 FAX (561) 992-7744

December 6, 2001

Mr. Hamilton S. Oven, Jr.
Administrator
Siting Coordination Office
Department of Environmental Protection
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Florida 32399

RECEIVED

DEC 10 2001

BUREAU OF AIR REGULATION

Re: Okeelanta Cogeneration Plant

Dear Mr. Oven:

On behalf of New Hope Power Partnership ("New Hope Power," an affiliate of Florida Crystals Corporation), which has acquired the Okeelanta Cogeneration Facility from Okeelanta Power L.P., I am sending you this letter to confirm and supplement the information that has been provided to you during recent discussions with our environmental attorney, David S. Dee.

On July 14, 2001, the electrical generator at the Okeelanta Cogeneration Plant ("Plant") failed as a result of a short circuit, which damaged the generator's windings and iron core. The generator was inoperable for approximately 60 days because the generator's manufacturer, Alstom, had to replace the windings and repair the iron core. On September 14, 2001, New Hope Power Partnership ("NHPP") attempted to resume normal operations, but the generator failed again, within a few minutes after it was energized. The second failure occurred in the iron core, in the location that presumably had been repaired. This time the damage was more extensive.

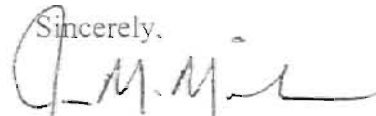
Following the second failure, NHPP again consulted with various experts and thoroughly evaluated its options, and everyone agreed that NHPP had two basic options: (1) install new windings and a new core in the existing generator; or (2) replace the existing generator with a new or used generator. With regard to the first option, NHPP learned that it would take at least 150 days to repair and rebuild the existing generator. However, even if the existing generator was repaired, NHPP was concerned that the generator might fail a third time. With regard to the second option, NHPP learned that Siemens Westinghouse ("SW") had a new 130 MVA generator available in Houston, as a result of a canceled order with another customer. SW guaranteed that the new generator could be installed much quicker than rebuilding the existing generator. After comparing the cost of repairing the old generator or installing a new generator, and comparing the cost

(i.e., lost revenues) associated with further delays in operations, it was clear that it would be more economical for NHPP to install the new SW generator. Accordingly, NHPP has purchased the new SW generator (Model Number TLRI-100/30-36; Serial Number 6084), which will be operational on or about December 20, 2001. The new generator will be rated at 130 MVA at 40 degrees C air temperature. Using a design of 0.8 power factor, the rated output of the new generator will be 104 MW.

Although the new generator will have the physical capacity to generate more than 75 MW (net) of electricity, the output of the new generator will be limited to 74.9 MW (net), based on a one hour average. NHPP will use the Plant's Distributed Control System (DCS) to ensure compliance with the 74.9 MW limit. The Plant's control room operators will establish the generator's megawatt set-point to maintain the one hour average at or below 74.9 MW. The instantaneous maximum output of the generator will be controlled by the steam turbine's governor to a predetermined set-point. The governor will close the steam inlet control valves, which reduce the generator's output. Thus, the Plant will be physically limited to 74.9 megawatts (net) by the DCS and steam turbine. As a practical matter, the Plant's electrical output also is physically limited by the step-up transformer, the generator breaker, and other critical and auxiliary equipment.

NHPP fully understands that it must comply with the Florida Electrical Power Plant Siting Act ("PPSA"). Although NHPP is investigating the feasibility of upgrading the Plant to allow the Plant to operate at levels greater than 75 MW in the future, NHPP will not increase the Plant's electrical output to such levels until NHPP receives the necessary approvals.

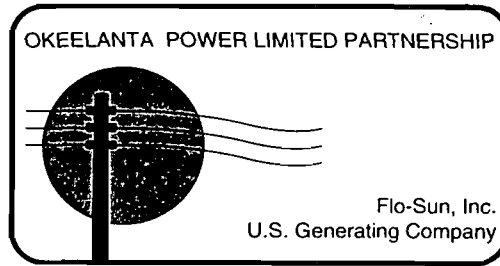
Sincerely,



James M. Meriwether
Environmental Manager

cc: Ricardo Lima
Gus Cepero
Rodney Williams
Bill Tarr
David Dee
Scott Goorland
Al Linero

July 8, 1997



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JUL 14 1997
BUREAU OF
AIR REGULATION

State of Florida
Department of Environmental Protection
Emissions Monitoring Section
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Attn: Mr. M.D. Harley, P.E., DEE
Administrator

Re: Okeelanta Power Limited Partnership
Sulfuric Acid Mist Emission Testing

Dear Mr. Harley:

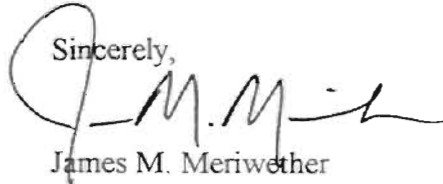
In a letter dated December 5, 1996, Okeelanta Power requested that Specific Condition #21 of our PSD permit be amended to delete Sulfuric Acid Mist (SAM) as an emission compliance test parameter and also remove the emission limit for SAM from Specific Condition #20. This request was based on the premise that testing for SAM was inappropriate for a biomass fired facility with high flue gas moisture and other interfering constituents such as ammonia.

In a letter dated April 16, 1997, FDEP retained the sulfuric acid mist emission standard for the facility and adopted the modified Method 8 test procedure as described by Clean Air Engineering.

Michelle Golden, an Environmental Manager for U.S. Generating Company, spoke with you recently at the FDEP Power Conference in Orlando regarding the SAM issue at Okeelanta and Osceola Cogeneration Plants. Based on your discussion it appears there still may be a possibility for removing SAM as a emission test parameter. If so, please advise so that I may take the appropriate course of action to make it happen. I have attached the previous correspondence on this issue for your review. Both Okeelanta and Osceola Cogeneration Plants are affected by the SAM permit requirement and therefore relief is sought for both facilities.

If you have any questions please contact me at (561) 993-1003.

Sincerely,



James M. Meriwether
Environmental Manager

cc: Al Linero - FDEP/Tallahassee

Ajaya K. Satyal - PBCHD

JMG

J. Roberson

M. Keegan

C. McDavid