## **CALPINE**



Calpine Corporation
Osprey Energy Center
1651 West Derby Avenue
Auburndale, Florida 33823
863-551-4600 (Main)

May 12, 2005

Federal Express Number: 7905 1562 3928

Mr. Mike Halpin
Bureau of Air Regulation
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
(850) 488-1344

RECEIVED
MAY 18 2005

Re: Annual Emissions Test Load Levels

Osprey Energy Center

Permit Number: PSD-FL-287

**BUREAU OF AIR REGULATION** 

Dear Mr. Halpin:

As you are aware, the Osprey Energy Center PSD Permit requires that the following annual stack tests be completed:

- NOx (27.5 lb/hr) while operating in Power Augmentation mode with the Duct Burner on (specific condition 20);
- CO (10 ppmvd @ 15% O2) while operating at 100% output with the duct burner off and no power augmentation (specific condition 21);
- VE (10% opacity @ 15% O2) with no load specified (Specific Condition 29); and
- Ammonia (9 ppmvd @ 15% O2) with no load specified.

Completion of these tests, as specified by the current permit, would require emissions testing at two load points. The Osprey Energy Center requests this testing be limited to one load point.

Based on our recent conversation, it is the Osprey Energy Center's understanding that the agency would consider allowing the facility to complete annual stack testing at a single load point (100% output with the duct burner on and power augmentation on). Testing at 100% output with the duct burner on and power augmentation on will provide the agency with compliance demonstration of the NOx lb/hr limit (27.5 lb/hr), CO ppmvd limit (17 ppmvd @15% O2), % Opacity limit and Ammonia slip ppmvd @15% O2 limit. In addition, Osprey will be conducting RATA testing on both the NOx and CO CEMS.

Osprey also requests that we be allowed to utilize an alternate method for the testing of ammonia emissions. The stack testing vendor has recommended that USEPA Method 320—Extractive FTIR (40 CFR63 Appendix A) be utilized in lieu of the specified

Mike Halpin Bureau of Air Regulation, FDEP May 12, 2005 Page 2 of 2

method (EPA Method 206). Extractive FTIR is a preferred method for measuring ammonia slip from gas-fired sources for several reasons. It provides real-time, on-site data on a one-minute time basis, similar to CEMs data. Ammonia slip concentrations tend to vary over time as the injection rate is adjusted, and manual methods do not give any information on the time variation in emissions, instead providing a 1-hour average. Because of the need for subsequent laboratory analysis, the manual methods do not guarantee that the ammonia will be detected above the analytical detection limit unless long test runs are performed. The FTIR detection limit for ammonia is below 1 ppm at these sources. The detailed quality assurance procedures in the EPA FTIR Test Method (320) include direct, system, and dynamic matrix spiking calibrations. The method is considered "self-validating" when these procedures are followed.

Calpine requests the agency provide written concurrence with the test strategy outlined above. Under separate cover, Osprey has already filed the required 21-day notice of scheduled testing. The current schedule calls for these tests to take place beginning on June 7, 2005.

If you have any further questions or concerns, please contact me by telephone at (813) 637-7305 or via email at <u>bborsch@calpine.com</u> or Heidi Whidden at (813) 637-7316 or hwhidden@calpine.com.

Sincerely,

CALPINE CORPORATION

Benjamin M. H. Borsch

Manager—Safety, Health and Environment

Cc: Mr. Bob Soich, FDEP Southwest District; Federal Express No.: 7905 1562 5765

Mr. Robert Callery, Osprey Mr. William Sena, Osprey

## **CALPINE**



Calpine Corporation
Osprey Energy Center
1651 West Derby Avenue
Auburndale, Florida 33823

R 863-551-4600 (Main)

May 16, 2005

Bureau of Air Monitoring and Mobile Sources Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Road MS 5500 Tallahassee, Florida 32399-2400 (850) 488-0114

Re: Annual Compliance Test and RATA Test Notification

**Osprey Energy Center** 

Calpine Construction and Finance Company, L.P.
Permit Number: PSD-FL-287 and ORIS Code: 55412
Federal Express Tracking Number: 791627449053

In accordance with 40 CFR Part 75 and the above-mentioned PSD Permit, please accept this letter as notification of the Annual Compliance Tests and Relative Accuracy Test Audits at the Osprey Energy Center. These tests are scheduled to be completed on June 7 and 8, 2005. Any testing variations from the permit have been or will be approved by FDEP—Tallahassee prior to testing.

If you have any questions or concerns, please feel free to call Heidi Whidden at (813) 637-7316.

Sincerely,

Benjamin M. H. Borsch, P.E.

Manager—SH&E

Alternate Designated Representative

Cc: Robert Soich—SW District FDEP; Federal Express No.: 1905 | 1562 5265 Wilson Haynes—Region IV, EPA; Federal Express No.: 1916 2744 1727 William Sena—OEC Operations