September 17, 2009

Jeff Koerner P.E Department of Environmental Protection Bureau of Air Regulation, New Source Review 2600 Blair Stone Road, M.S. 5500 Tallahassee, Florida 32399-2400

Re: FPL Martin Plant 3A CT

Dear Mr. Koerner

Martin Unit 3A is currently in a Combustor Inspection overhaul. Upon returning from the major overhaul the combustion turbine will require DLN tuning. The Combustor Inspection overhaul will not increase unit MW output and unit efficiency remains the same. Tuning the of the overhauled combustors will be required to minimize combustor dynamics at various operating modes and increase the starting and low load reliability of the unit minimizing emissions from startup and shutdown. The operating modes for the test will include:

- Startup on Combined Cycle Curve including holdpoints in primary mode and piloted premix ⊕ △ □ □ mode.
- Transfer into and out of Premix mode on both Combined and Simple Cycle Curves to tune after the for optimum transfer point and to minimize unit emissions.

The testing/tuning for unit 3A should take approximately 12 hours to complete, therefore we are requesting an allowable permit exceedence for required maintenance activities to exceed the 177 pounds per hour NOx limit for the 12 hour test duration per unit. During the testing/tuning period best operational practices to minimize emissions will be adhered to and the duration of excess emissions shall be minimized. The testing is scheduled to begin no sooner than Monday, September 21, 2009 for Martin Unit 3A. Unit operators will avoid excess emissions that may reasonably be prevented during startup, shutdown and every effort will be taken to minimize emissions during the testing/tuning period.

After receipt and initial review of this letter I would appreciate your time and the opportunity to discuss this matter and answer any questions you might have. Please let me know when it would be convenient for you to discuss this matter. My telephone number is 561-691-2894.

Sincerely,

John C. Hampp

Manager, Air Programs
Florida Power & Light Company

CC:

FDEP SouthEast District FDEP Talahassee

Mitchell, Bruce

From:

Koerner, Jeff

Sent:

Thursday, September 17, 2009 10:51 AM

To:

Mitchell, Bruce

Cc:

Walker, Elizabeth (AIR); Cascio, Tom; Hampp, John

Subject:

FW: Martin Unit 3A Tuning

Attachments: Draft DLN TUNING UNIT 3A Combustor tuning_JCH _3_.pdf

Bruce,

I just received this request from John Hampp.

Please review and prepare a letter similar to the one you did for the FPL Sanford plant.

Thanks!

Jeff Koerner, New Source Review Section 850/921-9536

From: Hampp, John [mailto:John.Hampp@fpl.com] **Sent:** Thursday, September 17, 2009 10:12 AM

To: Koerner, Jeff

Cc: Walker, Elizabeth (AIR); Cascio, Tom

Subject: Martin Unit 3A Tuning

Jeff,

The Martin plant is currently completing a hot gas path overhaul of the Unit 3A CT and will be returning from the outage on the 21st of September. We sent notice to the Southeast District and sent a copy via US Mail to your office as well. The Martin Unit 3 and 4 CT's, to my knowledge, were the first 7FA's in the state and have been a learning platform for both FPL and the Department about operating and maintenance issues associated with the lean burn DLN CT's. We have routinely sent requests to the Department for allowable excess emissions during DLN tuning following major outages and for excess emissions during green rotor soak periods following rotor refurbishment/replacement. While Unit 8, and most of our other facilities, have allowable excess emissions from tuning in their Title V Permit the Martin Unit 3 & 4 CT's do not have this condition and have always been done on a case-by-case basis. I will have Kevin Washington work with the plant and Tom Cascio to see if we can modify the Title V to include this issue as a permitted allowable excess emission.

Attached you will find our request for the allowable excess emissions which may occur during the DLN tuning for Unit 3A. Should you have any questions, or need any additional information, please contact me at your convenience.

John Hampp Manager, Air Programs FPL Corporate Environmental Services 561-691-2894 john.hampp@fpl.com