## Walker, Elizabeth (AIR)

From:

Koerner, Jeff

Sent:

Friday, December 18, 2009 9:56 AM Walker, Elizabeth (AIR); Mitchell, Bruce

To: Cc:

Vielhauer, Trina

Subject:

FW: Martin Unit 3B DLN Tuning Session

Attachments:

DLN TUNING UNIT 3B Combustor tuning\_JCH\_final.pdf

Elizabeth, please log this in as a project and assign to Bruce.

Bruce, you know the drill. Also, give FPL a call and find out what their upcoming schedule is for DLN tuning any of the remaining units. Please encourage them to submit an application to revises their AC/AV permits to "pre-authorize' DLN tuning sessions.

Thanks!

Jeff

0850001-023-AC

**From:** Hampp, John [mailto:John.Hampp@fpl.com]

Sent: Friday, December 18, 2009 7:27 AM

To: Vielhauer, Trina

Cc: Koerner, Jeff; Anderson, Lennon; Welch, Willie; Reichel, Bill

Subject: Martin Unit 3B DLN Tuning Session

Dear Ms. Vielhauer,

Attached you will find FPL's request for allowable excess emissions during a planned DLN Tuning/Testing session following a hot gas path overhaul of the Unit 3B combustion turbine. FPL has previously submitted, and the department has granted, similar requests following outages where tuning and testing of the turbines is required. Representatives of the turbine manufacturer will be on-site next week to assist in the tuning session.

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
561-676-1838 cell
561-691-2894 office
john.hampp@fpl.com



December 18, 2009

Electronically Sent – Received Receipt Requested

Trina L. Vielhauer, Chief Bureau of Air Regulation Department of Environmental Protection Bureau of Air Regulation 2600 Blair Stone Road, M.S. 5500 Tallahassee, Florida 32399-2400

## Re: FPL Martin Plant 3B CT Tuning Session

Dear Ms. Vielhauer,

Martin Unit 3B has been scheduled for a DLN combustor tuning session to improve combustion dynamics of the unit and to correct combustion instability that is occurring at various points across the load curve. Although the unit is environmentally compliant, the instability creates opportunities for unit reliability to be compromised. To optimize the combustors stability at all points across the load curve will require a DLN tuning session. Tuning of the Unit 3B combustors will also be required at the various operating modes to maintain starting and low load reliability to stabilize combustor dynamics minimizing emissions from startup and shutdown. The operating modes for the testing/tuning session will include:

- Startup on Combined Cycle Curve including hold points in primary mode and piloted premix mode.
- Startup on Simple 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 for optimum transfer point and to minimize unit emissions.

FPL has projected that the testing/tuning for unit 3B will take approximately 12 hours to complete, therefore we are requesting an allowable permit exceedence of the 177 pounds per hour NOx limit for the 12 hour test duration per unit for this manufacturer required maintenance activity. To minimize emissions during the testing/tuning period, FPL will follow best operational practices at all times. 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. The testing is scheduled to begin no sooner than Monday, December 21, 2009 for Martin Unit 3B when manufacturer representatives from GE will be on-site next week. Similar requests for allowable excess emissions have been granted by the Department previously for the 7FA combustion turbines at Martin Units 3 and 4 and other FPL 7FA installations.

Should you have any questions, or need any additional information, I am available at your convenience to discuss our request for allowable excess emissions during the planned tuning/testing session on Unit 3B. I can be reached by email or on my cell phone at 561-676-1838.

Sincerely,

John C. Hampp

Manager, Air Programs

Florida Power & Light Company

john.hampp@fpl.com

cc: Mr. Lennon Anderson, DEP Southeast Office: (lennon.anderson@dep.state.fl.us)

Mr. Jeff Koerner, Bureau of Air Regulation: (jeff.koerner@dep.state.fl.us)

Mr. William Reichel, Florida Power & Light Company: (bill.reichel@fpl.com)

Mr. Willie Welch, Florida Power & Light Company: (willie.welch@fpl.com)