

Florida Municipal Power Agency

REC

DEC 15 2009

December 14, 2009

Jeff Koerner, P.E. New Source Review Program Administrator Bureau of Air Regulation Florida Dept. of Environmental Protection 2600 Blair Stone Road, MS 5505 Tallahassee, FL 32399-2400 Jonathan Holtom, P.E., CPM
Title V Program Administrator
Bureau of Air Regulation
Florida Dept. of Environmental Protection
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32399-2400

Re: FMPA Treasure Coast Energy Center – Facility ID No. 1110121 Revision request for 1110121-003-AC and 1110121-002-AV

Dear Mr. Koerner:

Dear Mr. Holtom:

We would like to request the following revisions to the above referenced construction and operation permits for Treasure Coast Energy Center.

1110121-003-AC Condition 18.e and 1110121-002-AV Condition A.14.e:

Fuel Switching: Excess emissions due to oil-to-gas fuel switching shall not exceed 1 hour in a 24-hour block.

Since excess emissions can occur during fuel switching between oil and gas and vice-versa, for clarification purposes, we are requesting to reword these conditions as follows:

Excess emissions due to oil-to-gas and gas-to-oil fuel switching shall not exceed l hour each, respectively, in a 24-hour block.

1110121-003-AC Condition 20 and 1110121-002-AV Condition A.20:

DLN Tuning. CEMS data collected during initial or other major dry low nitrogen oxides (DLN) tuning sessions shall be excluded from the CEMS compliance demonstration provided the tuning session is performed in accordance with the manufacturer's specifications. A "major tuning session" would occur after completion of initial construction, a combustor change-out, a major repair or maintenance to a combustor, or other similar circumstances. Prior to performing any major tuning session, the permittee shall provide the Compliance Authority with an advance notice of at least 14 days that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal, or electronic mail.

We are requesting to reword the "major tuning session" description as follows:

A "major tuning session" would occur after completion of initial construction, a combustor change-out, a major repair or maintenance to a combustor, or circumstances as identified or requested by the equipment vendor.

1110121-003-AC Condition 23 and 1110121-002-AV Condition A.26:

Annual Compliance Tests. During each federal fiscal year (October 1st, to September 30th), the gas turbine shall be tested to demonstrate compliance with the emission standard for visible emissions. NOX and CO emissions data collected during the required continuous monitor Relative Accuracy Test Audits (RATAs) may be used to demonstrate compliance with the CO and NOX standards. Annual testing to determine the ammonia slip shall be conducted while firing the primary fuel. NOX emissions recorded by the CEMS shall be reported for each ammonia slip test run. CO emissions recorded by the CEMS shall be reported for the visible emissions observation period.

We are requesting to reduce the frequency of ammonia slip testing to every five years in accordance with 62-297.310(a)4, based on the following potential to emit (PTE) calculations, which verify that the ammonia slip PTE is **74 tons per year** (less than 100 tons per year).

NH3-Oil = $(5 \text{ ppm})^*(4.42\text{E}-8 \text{ lb/dscf/ppm})^*(9190 \text{ dscf/mmBtu})^*(1986 \text{ mmBtu/hr})^*(20.9/(20.9-15))^*(500 \text{ hrs})/(2000 \text{ lb/ton}) = 3.6 \text{ tons}$

NH3-Gas-CT = $(5 \text{ ppm})^*(4.42\text{E}-8 \text{ lb/dscf/ppm})^*(8710 \text{ dscf/mmBtu})^*(1900 \text{ mmBtu/hr})^*(20.9/(20.9-15))^*(8260 \text{ hrs})/(2000 \text{ lb/ton}) = 53.5 \text{ tons}$

NH3-Gas-DB = $(5 \text{ ppm})^*(4.42\text{E}-8 \text{ lb/dscf/ppm})^*(8710 \text{ dscf/mmBtu})^*(565.3 \text{ mmBtu/hr})^*(20.9/(20.9-15))^*(8760 \text{ hrs})/(2000 \text{ lb/ton}) = 16.9 \text{ tons}$

Therefore, we would like to revise the above permit conditions by removing the underlined sentences and to revise <u>1110121-002-AV Condition A.27</u> by adding the underlined wording as shown here:

Compliance Tests Prior To Renewal. Compliance tests shall be performed for PM/PM10, ammonia slip, and SAM/SO2 once every 5 years. NOX emissions recorded by the CEMS shall be reported for each ammonia slip test run. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Condition A.13

Please contact Amy Deese at 321-239-1004 if you have any questions or require additional

information.

Edward S. Leongomez Responsible Official,

Treasure Coast Energy Center

cc: Lennon Anderson, FDEP SE District
Lee Hoefert, FDEP SE District
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