One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

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MAY 12 2003

BUREAU OF AIR REGULATION

GULF POWER
A SOUTHERN COMPANY

May 7, 2003

Mr. Scott M. Sheplak, P.E.
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: First Fire and Synchronization to the Grid
Stanton Units 25 & 26 (PSD-FL-313, PA 81-14SA2)

Dear Mr. Sheplak:

This is a follow-up to our previous conversations regarding the first fire events for the Stanton Units 25 & 26. As requested I have put the first fire and synchronization dates in writing and they are as follows:

Unit	First Fire	Synchronization to the Grid
25, Gas Turbine A	April 28, 2003	April 29, 2003
26, Gas Turbine B	May 6, 2003	May 7, 2003

If you should have any questions regarding this information please feel free to give me a call at (850) 444-6573.

Sincerely,

Richard "Mike" Markey, QEP
Environmental Affairs

Cc: Ronnie Walston, Southern Power
Robert Schaffeld, Southern Power
Heather Turner, Southern Power
Brian Barham, Southern Company Services
Danny Herrin, Southern Company Services
Tuck Tucker, Gulf Power Company
Jim Vick, Gulf Power Company
G. Dwain Waters, Gulf Power Company
Denise Stalls, OUC
Fred Haddad, OUC
Lynn Haynes, EPA – Region IV
Leonard Kozlov, FDEP – Central District
John Turner, FDEP – Central District
Garry Kuberski – FDEP – Central District

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

fl –
good correspondence

GULF POWER
A SOUTHERN COMPANY

Certified

April 2, 2003

Mr. Scott M. Sheplak, P.E.
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Installation Confirmation and Guarantee of Performance
Combined Cycle Cooling Tower Drift Eliminators – Stanton Units 25 & 26
Specific Condition 20, PSD-FL-313, PA 81-14SA2

Dear Mr. Sheplak:

The cooling tower and drift eliminators for the Stanton A permit have been installed. The drift eliminators utilized meet the requirements in Specific Condition 20 of the PSD permit.

If you should have any questions regarding this submittal, please feel free to give me a call at (850) 444-6573.

Sincerely,

Richard "Mike" Markey, P.G., Q.E.P.
Environmental Affairs

Enclosure – Cooling Tower Drift Letter – Marley Cooling Technologies

Cc: Ronnie Walston, Southern Power
Robert Schaffeld, Southern Power
Heather Turner, Southern Power
Brian Barham, Southern Company Services
Danny Herrin, Southern Company Services
Tuck Tucker, Gulf Power Company
Jim Vick, Gulf Power Company
G. Dwain Waters, Gulf Power Company
Denise Stalls, OUC
Lynn Haynes, EPA – Region IV
Leonard Kozlov, FDEP – Central District
John Turner, FDEP – Central District
Garry Kuberski, FDEP – Central District

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

FL
- Final Correspondence -

GULF POWER
A SOUTHERN COMPANY

March 31, 2003

Mr. Scott M. Sheplak, P.E.
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: STARTUP NOTIFICATION
Stanton Units 25 & 26 (PSD-FL-313, PA 81-14SA2)

Dear Mr. Sheplak:

Southern Company Florida LLC hereby modifies our initial startup notification provided on March 14, 2002 for the combined cycle units referenced above at the Curtis H. Stanton Energy Center in Orange County. The updated "first fire" for Unit 25 now scheduled between April 21 and April 30, 2003. It is anticipated that Unit 26 will startup 7-10 days after Unit 25. Verbal notification of the first fire will be provided 48 hours prior to this event. The "tie to the grid" trigger date will be the same dates as discussed above.

If you have any questions or need further information regarding this notification, please call me at (850) 444-6573.

Sincerely,

Richard "Mike" Markey, P.G., Q.E.P.
Environmental Affairs

Cc: Robert G. Moore, Southern Power
Ronnie Walston, Southern Power
Robert Schaffeld, Southern Power
Heather Turner, Southern Power
Brian Barham, Southern Company Services
Danny Herrin, Southern Company Services
Tuck Tucker, Gulf Power Company
Jim Vick, Gulf Power Company
G. Dwain Waters, Gulf Power Company
Denise Stalls, OUC
Lynn Haynes, EPA – Region IV
Leonard Kozlov, FDEP – Central District
John Turner, FDEP – Central District
Garry Kuberski, FDEP – Central District

Marley Cooling Technologies
7401 W 129 Street
Overland Park, KS 66213 USA
913 664 7434
Fax 913 664 7857
darin_baugher@marleyct.com

March 22, 2003

Southern Company Site Manager
Stanton Combined Cycle Project
P.O. BOX 781295
Orlando, FL 32878

Att: Mr. Ronnie Walston

RE: Stanton Energy Center Cooling Tower Drift

Marley offers the following statement regarding the drift rate:

"The Stanton cooling tower was installed with Marley's TU12C drift eliminators. The TU12 eliminator is the latest in drift elimination technology and is designed to allow a maximum drift rate of 0.0005%."

I trust this will satisfy the concerns the plant has. Please contact us if you have any questions.

Sincerely,

Darin Baugher
Manager, Sales Support
Field Erected Products

One Energy Place
Pensacola, FL 32520

GULF POWER
A SOUTHERN COMPANY

Date: March 14, 2003

Scot Sheplak
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Mail Station #5510
Tallahassee, FL 32399-2400

RE: STANTON A COMBINED CYCLE; PERMIT # 0950137-002-AC 9PSD-313)
PROCESS VARIABLES

Pursuant to Special Condition #43, please find the following list of equipment which will be used to determine process variables related to emissions reductions at Plant Stanton A. This equipment will be calibrated to allow the applicable process variable to be determined within 10% of its true value [Rule 62-297.310(5), F.A.C.]

CT A - Natural Gas Flowmeter: Manufacturer - Triad, S/N 22-4027, Model # 9694
CT A - Fuel Oil Flowmeter: Manufacturer - Micro Motion, S/N 249979, Model # D300 (3") DS300S155SU
CT B - Natural Gas Flowmeter: Manufacturer Triad, S/N 22-4028, Model # 9694
CT B - Fuel Oil Flowmeter: Manufacturer - Micro Motion, S/N 249965, Model # D300 (3") DS300S155SU
HRSG A Duct Burner - Natural Gas Flowmeter: COEN, S/N 0075404, Model # 2335-004-327
HRSG B Duct Burner - Natural Gas Flowmeter: COEN, S/N 0075405, Model # 2335-004-327
Ammonia Flowmeter
NOx analyzer on upstream side of SCR

Please call Mike Markey (850.444.6573) or me (850.444.6153) if you have questions or if we can be of service.

Thank you,
John McPherson
Environmental Specialist
Gulf Power Company

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

-5/P – general correspondence

RECEIVED
MAR 18 2003
BUREAU OF AIR REGULATION

GULF POWER
A SOUTHERN COMPANY

March 14, 2003

Mr. Scott M. Sheplak, P.E.
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Custom Fuel Monitoring Plan
Stanton Units 25 & 26 (PSD-FL-313, PA 81-14SA2)

Dear Mr. Sheplak:

This letter is to confirm that the Custom Fuel Monitoring Plan requirements referenced above in our final permit PSD-FL-313, constitutes an approved CFMP and these requirements will be followed at the Stanton A facility. The CFMP portions of our permit have been included as Attachment A.

If you should have any questions regarding the Custom Fuel Monitoring Plan, please feel free to call Mike Markey at (850) 444-6573 or myself at (850) 444-6527.

Sincerely,

Dwain Waters Q.E.P.

G. Dwain Waters, Q.E.P.
Air Quality Programs Supervisor

Attachment A – NSPS Subpart GG Requirements for Gas Turbines

CC: Ronnie Walston, Southern Power
Robert Shaffeld, Southern Power
Heather Turner, Southern Power
Brian Barham, Southern Company Services
Danny Herrin, Southern Company Services
Jim Vick, Gulf Power Company
Tuck Tucker, Gulf Power Company
Mike Markey, Gulf Power Company

S:\air\stanton\customfuelmonitoringplan

ATTACHMENT A
NSPS SUBPART GG REQUIREMENTS
FOR GAS TURBINES

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

OUC/KUA/FMPA/Southern Company – Florida, LLC
One Energy Place
Pensacola, FL 32520-0328

File No.	PSD-FL-313 (PA81-14SA2)
FID No.	0950137
SIC No.	4911
Expires:	December 31, 2004

Authorized Representative:

Mr. Robert G. Moore, VP of Power Generation and Transmission, Gulf Power Company

PROJECT AND LOCATION:

Permit pursuant to the requirements for the Prevention of Significant Deterioration of Air Quality (PSD Permit) for the construction of a nominal 640 megawatt (MW) Combined Cycle unit consisting of: two nominal 170 MW, General Electric "F" Class (PG7241FA) combustion turbine-electrical generators, fired with pipeline natural gas or diesel and equipped with evaporative coolers on the inlet air system; two supplementally fired heat recovery steam generators (HRSGs), each with a 160 ft. stack; one steam turbine-electrical generator rated at approximately 300 MW; one fresh water cooling tower; one distillate fuel storage tank and ancillary equipment. The combined cycle unit will achieve approximately 700 megawatts during extreme winter peaking conditions. The unit is to be installed at the existing OUC Stanton Energy Center, located at 5100 South Alafaya Trail, Orlando, Orange County. UTM coordinates are: Zone 17; 483.61 km E, 3151.1 km N.

STATEMENT OF BASIS:

This PSD permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and 40CFR52.21. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection.

The attached Appendices are made a part of this permit:

Appendix GC	Construction Permit General Conditions
Appendix GG	Subpart GG, Standards of Performance for Stationary Gas Turbines
Appendix XS	Semi-Annual Continuous Emission Monitor Systems Report

Howard L. Rhodes, Director
Division of Air Resources Management

SECTION IV. APPENDIX GG

NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

NSPS SUBPART GG REQUIREMENTS

[Note: Inapplicable provisions have been deleted in the following conditions, but the numbering of the original rules has been preserved for ease of reference to the original rules. The term "Administrator" when used in 40 CFR 60 shall mean the Department's Secretary or the Secretary's designee. Department notes and requirements related to the Subpart GG requirements are shown in **bold** immediately following the section to which they refer. The rule basis for the Department requirements specified below is Rule 62-4.070(3), F.A.C.]

Pursuant to 40 CFR 60.332 Standard for Nitrogen Oxides:

(a) On and after the date of the performance test required by § 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraph (b) section shall comply with:

(1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable NO_X emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt-hour.

F = NO_X emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of this section.

(3) F shall be defined according to the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NO_X percent by volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	0.04(N)
$0.1 < N \leq 0.25$	0.004+0.0067(N–0.1)
$N > 0.25$	0.005

Where, N = the nitrogen content of the fuel (percent by weight).

Department requirement: While firing gas, the "F" value shall be assumed to be 0.

[Note: This is required by EPA's March 12, 1993 determination regarding the use of NO_X CEMS. The "Y" values are approximately 10.0 for natural gas and 10.6 for fuel oil. The equivalent emission standards are 108 and 102 ppmvd at 15% oxygen. The emissions standards of this permit are more stringent than this requirement.]

(b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.

Pursuant to 40 CFR 60.333 Standard for Sulfur Dioxide:

On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with:

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel, which contains sulfur in excess of 0.8 percent by weight.

Pursuant to 40 CFR 60.334 Monitoring of Operations:

(b) The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

Department requirement: The owner or operator is allowed to use vendor analyses of the fuel as received to satisfy the sulfur content monitoring requirements of this rule for fuel oil. Alternatively, if the fuel oil storage tank is isolated from the combustion turbines while being filled, the owner or operator is allowed to determine the sulfur content of the tank after completion of filling of the tank, before it is placed back into service.

[Note: This is consistent with guidance from EPA Region 4 dated May 26, 2000 to Ronald W. Gore of the Alabama Department of Environmental Management.]

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section.

(1) Department requirement: The requirement to monitor the nitrogen content of pipeline quality natural gas fired is waived. The requirement to monitor the nitrogen content of fuel oil fired is waived because a NO_X CEMS shall be used to demonstrate compliance with the NO_X limits of this permit. For purposes of complying with the sulfur content monitoring requirements of this rule, the owner or operator shall obtain a monthly report from the vendor indicating the sulfur content of the natural gas being supplied from the pipeline for each month of operation.

(2) [Note: This is consistent with EPA's custom fuel monitoring policy and guidance from EPA Region 4.]

(c) For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

(1) *Nitrogen oxides.* Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in § 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in § 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

Department requirement: NO_X emissions monitoring by CEM system shall substitute for the requirements of paragraph (c)(1) because a NO_X monitor is required to demonstrate compliance with the standards of this permit. Data from the NO_X monitor shall be used to determine "excess emissions" for purposes of 40 CFR 60.7 subject to the conditions of the permit.

[Note: This is consistent with guidance from EPA Region 4 dated May 26, 2000 to Ronald W. Gore of the Alabama Department of Environmental Management.]

(2) *Sulfur dioxide.* Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.

Pursuant to 40 CFR 60.335 Test Methods and Procedures:

(a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 per-cent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.

(b) In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.

(c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 and 60.333(a) as follows:

(1) The nitrogen oxides emission rate (NO_X) shall be computed for each run using the following equation:

$$NO_X = (NOxo)\,(Pr/Po)^{0.5}\, e^{19(Ho-0.00633)}\,(288°K/Ta)^{1.53}$$

where:

NO_X = emission rate of NO_X at 15 percent O2 and ISO standard ambient conditions, volume percent.

NOxo = observed NO_X concentration, ppm by volume.

Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

Po = observed combustor inlet absolute pressure at test, mm Hg.

Ho = observed humidity of ambient air, g H2O/g air.

e = transcendental constant, 2.718.

Ta = ambient temperature, °K.

Department requirement: The owner or operator is not required to have the NO_X monitor continuously correct NO_X emissions concentrations to ISO conditions. However, the owner or operator shall keep records of the data needed to make the correction, and shall make the correction when required by the Department or Administrator.

[Note: This is consistent with guidance from EPA Region 4.]

(2) The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the

minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

Department requirement: **The owner or operator is allowed to conduct initial performance tests at a single load because a NO_X monitor shall be used to demonstrate compliance with the BACT NO_X limits of this permit.**

[Note: This is consistent with guidance from EPA Region 4.]

(3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO_X emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.

Department requirement: **The owner or operator is allowed to make the initial compliance demonstration for NO_X emissions using certified CEM system data, provided that compliance be based on a minimum of three test runs representing a total of at least three hours of data, and that the CEMS be calibrated in accordance with the procedure in section 6.2.3 of Method 20 following each run. Alternatively, initial compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the NO_X monitor. The span value specified in the permit shall be used instead of that specified in paragraph (c)(3) above.**

[Note: These initial compliance demonstration requirements are consistent with guidance from EPA Region 4. The span value is changed pursuant to Department authority and is consistent with guidance from EPA Region 4.]

(d) The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference – see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

Department requirement: **The permit specifies sulfur testing methods and allows the owner or operator to follow the requirements of 40 CFR 75 Appendix D to determine the sulfur content of liquid fuels.**

[Note: This requirement establishes different methods than provided by paragraph (d) above, but the requirements are equally stringent and will ensure compliance with this rule.]

(e) To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (d) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[Note: The fuel analysis requirements of the permit meet or exceed the requirements of this rule and will ensure compliance with this rule.]

File

Florida Department of
Environmental Protection

Memorandum

TO: Len Kozlov, CD

FROM: Scott Sheplak, P.E.

DATE: July 28, 1997

SUBJECT: Completeness Review of an Application Package for a Title V Operation Permit
Orlando Utilities Commission, Stanton Energy: 0950137-001-AV

Enclosed is an application package for a Title V operation permit that is being processed in Tallahassee. Please review the package for completeness and respond in writing by August 15, 1997, if you have any comments. Otherwise, no response is required.

It is very important to verify the compliance statement regarding the facility, since we do not have a readily effective means of determining compliance at the time the application was submitted. Please advise if you know of any emissions unit(s) that were not in compliance at that time and provide supporting information. You should have a copy on file of the original initial Title V permit application submittal. Also, please do not write on these documents.

If there are any questions, please call the project engineer, Syed Arif, at 904/488-1344 or SC: 278-1344.

RBM/bjb

Enclosure

cc: Alan Zahm

7/28 Reading File
Syed Arif