

Facility Name: **West Georgia Generating Company L.L.C.**
 City: Thomaston
 County: Upson
 AIRS #: 04-13-293-00027

Application #: TV-13041
 Date Application Received: May 8, 2001
 Date Application Deemed
 Administratively Complete: July 8, 2001
 Date of Draft Permit: May 31, 2002
 Permit No: 4911-293-0027-V-01-0

Program	Review Engineers	Review Managers
SSPP/ASU	Brian Gregory	Jac Capp
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ISMP	Jim Kelly	Larry Webber
Toxics	Not Applicable	Not Applicable

Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 operating permit. Complex issues and unusual items are explained herein simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act Amendments of 1990. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Chapter I of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to West Georgia Generating Facility and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name: West Georgia Generating Facility L.L.C.
2. Parent/Holding Company Name: Mirant Corporation
3. Previous and/or Other Name(s)

West Georgia Generating Facility was under the ownership of SONAT. During the fall of 1999, SONAT merged with El Paso Energy. Mirant purchased the facility from El Paso Energy in the winter of 2002.

4. Facility Location: 95 Yamaha Parkway Thomaston, Upson County, Georgia 30286
5. Attainment or Non-attainment Area Location

Upson County is an attainment area for all pollutants but has been determined, by the Division, to be an area contributing to the ambient level of ozone in the metropolitan Atlanta ozone nonattainment area.

6. Class I Area Impacts

The facility is not located within 100 km of a Class I area.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current permits (including Part 71 permits), as amended, issued to the facility. Based on a comparative review of Item 19 in Section 1.10 of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office, comments are listed in Table 2 below.

Table 1: List of Current Permits as Amended

Permit Number and/or Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
		Yes	No
4911-293-0027-P-01-0	June 7, 1999	X	
4911-293-0027-P-01-1	October 31, 2000	X	
4911-293-0027-E-02-0	December 4, 2000	X	

Table 2: Comments on Specific Permits

Permit Number	Comments
4911-293-0027-P-01-0	Original construction and operation permit for four combustion turbines and one No. 2 fuel storage tank.
4911-293-0027-P-01-1	Amendments to the original permit specifying operational limits when burning No. 2 fuel, and limits on NOx excess emissions.
4911-293-0027-E-02-0	Acid Rain Program Permit

D. Process Description

1. SIC Codes(s)

Major - 4911
Other - None

2. Description of Product(s)

The facility produces electricity for sale.

3. Overall Facility Process Description

This facility consists of four simple cycle combustion turbines (T001, T002, T003, and T004). The units fire natural gas as the primary fuel and low sulfur distillate fuel as the backup. The facility stores the distillate fuel in a 1.386 M-gallon tank. When fired with natural gas, each unit generates a nominal electrical output of 167 megawatts (MW). Each unit generates 175 MW when fired with No. 2 fuel oil. The facility is an independent power plant designed for non-utility power generation.

4. Overall Process Flow Diagram

The facility provided an overall process flow diagram in their application.

E. Regulatory Status

1. PSD/NSR

This facility is a PSD major source because it has potential emissions of nitrogen oxides (NOx), sulfur dioxide (SO₂) and carbon monoxide (CO) greater than 250 tpy (it is not one of the 28 named source categories under PSD).

2. Title V Major Source Status by Pollutant

Table 3: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓	✓		
PM ₁₀	✓	✓		
SO ₂	✓	✓		
VOC	✓			✓
NO _x	✓	✓		
CO	✓	✓		
TRS	✓			✓
H ₂ S	✓			✓
Individual HAP	✓			✓
Total HAPs	✓			✓

3. MACT Standards

This facility is not subject to a proposed or final MACT standard; however they could be subject to a future MACT standard for combustion turbines.

4. Program Applicability

Program Code	Applicable (y/n)
Program Code 6 - PSD	Yes
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	Yes
Program Code M – Part 63 NESHAP	No
Program Code V – Title V	Yes

Regulatory Analysis

II. Facility Wide Requirements

- A. Emission and Operating Caps:
None Applicable.
- B. Applicable Rules and Regulations
 - Rules and Regulations Assessment - Not applicable.
 - Emission and Operating Standards - Not applicable.
- C. Compliance Status – See Section VII.F.
- D. Operational Flexibility – See Section VII.A.
- E. Permit Conditions
None Applicable.

III. Regulated Equipment Requirements

A. Brief Process Description

The facility has four simple cycle General Electric (GE) 7FA combustion turbines, each with a nominal electrical output of 167 MW when firing natural gas and 175 MW when firing No. 2 fuel oil. Natural gas serves as the primary fuel source for the combustion turbines, with low sulfur No. 2 distillate oil used as the backup. To reduce NO_x formation, dry low-NO_x combustors are used when the turbines are fired with natural gas, and water injection is used to control NO_x formation during fuel oil firing. The turbines are vented through individual 95-ft stacks.

B. Equipment List for the Process

Equipment List for the Process

Emission Unit ID No.	Emission Unit Description	Pollutant(s) Emitted	Applicable Requirements	Is the Rule or Regulation Federally Enforceable?	APCE* Control ID No.	APCE Description
T001, T002, T003, T004	Combustion turbines	NO _x CO VOC SO ₂ PM PM-10 HAPs	40 CFR 52.21 40 CFR 60, Subpart GG 40 CFR 60, Subpart A 40 CFR 72 40 CFR 73 40 CFR 75 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 391-3-1-.02(2)(nnn)	Yes Yes Yes Yes Yes Yes Yes Yes Yes	DRY1 DRY2 WAT1 WAT2	DLN** DLN WI*** WI
TNK1	No. 2 Fuel Oil Storage Tank	VOC HAPs	40 CFR 60 Subpart Kb	Yes	None	

* APCE = Air Pollution Control Equipment

** DLN = Dry Low NO_x burners

*** WI = Water Injection

C. Equipment & Rule Applicability

Equipment Group - Combustion Turbines

West Georgia Generating operates four GE 7FA combustion turbines, T001, T002, T003 and T004, each with a power output rating of approximately 167 MW when fired with natural gas. These units are fired with pipeline quality natural gas, as the primary fuel, and low sulfur distillate fuel oil, as the backup fuel. Each turbine utilizes dry low-NO_x (DLN) burner technology to minimize NO_x emissions.

The hours of operation and the total consumption of fuel oil limit the operation of the combustion turbines. Each combustion turbine is limited to 4,760 operating hours burning either natural gas or fuel oil. Further more, each turbine is limited to 1,687 hours of operation on fuel oil alone.

Finally, the combustion turbines are limited to a combined total consumption of fuel oil of 93.5 million gallons.

Each combustion turbine is subject to the requirements of 40 CFR 60, Subpart GG - "Standard of Performance for Stationary Gas Turbines" because they have a heat input at peak load equal to or greater than 10.7 gigajoules per hour [10.14 MMBtu/hr], based on the lower heating value of the fuel fired; and because the turbines were constructed after October 3, 1977. The NSPS General Provisions [40 CFR 60, Subpart A] also apply to each turbine. In addition, each turbine is subject to the requirements of 40 CFR 52.21, Prevention of Significant Deterioration, because the facility has a potential to emit greater than or equal to 250 tons per year of a criteria pollutant (this is not one of the 28 named sources because the facility does not utilize steam in electric power production).

The allowable PM emission rate from this Equipment Group is established by 40 CFR 52.21(j) [i.e., PSD] which specifies the BACT PM limit for each combustion turbine. These emission units are not subject to Georgia Rule 391-3-1-.02(2)(d) because they do not meet the definition of "fuel burning equipment" in the Georgia Rules.

The allowable NOx emission rate from this Equipment Group is specified by NSPS Subpart GG [40 CFR 60.332(b)] and by the best available technology (BACT). BACT specifies the most stringent NOx emission rate setting the limit at 12 ppmvd at 15% oxygen during normal operations (non-peak) and 15 ppmvd at 15% oxygen based on a 30-day rolling average including peak firing, while firing natural gas and 42 ppmvd at 15% oxygen while firing fuel oil. Therefore the BACT permit emissions limit subsumes the NSPS Subpart GG emissions limit.

However, since the facility is in a county contributing to the Atlanta Region Nonattainment area, the facility must comply with Georgia Rule 391-3-1-.02(2)(nnn), which places a NOx limit of 30 ppm @ 15% oxygen on the combustion turbines during the ozone season, May 1 through September 31. When firing natural gas the facility should comply with this rule, but if the backup fuel is fired the facility could exceed the limit.

The allowable fuel sulfur content limit for fuel combusted by the turbines in this Equipment Group is specified by NSPS Subpart GG [40 CFR 60.332(b)], PSD, and by Georgia Rule 391-3-1-.02(2)(g). BACT specifies the most stringent fuel sulfur content limit, and the permit emissions limit subsumes the NSPS Subpart GG and Georgia Rule (g) sulfur content limits.

The Acid Rain Program regulates sulfur dioxide emissions from the turbines.

The allowable CO and VOC emission rates from this Equipment Group are established only by PSD.

The allowable opacity limit is determined by BACT and Georgia Rule 391-3-1-.02(2)(b). Georgia Rule (b) applies to this Equipment Group because the turbines are subject to at least one other emission limitation in Georgia Rule 391-3-1-.02(2). The BACT limit specifies the most stringent opacity standard, and therefore the permit emissions limit subsumes the Georgia Rule (b) requirement.

The following table illustrates the allowable emission limits for the combustion turbines:

	Natural Gas	No. 2 Fuel Oil
NO _x (ppmvd@ 15% O ₂)	12	42
CO (ppmvd@ 15% O ₂)	15	34
PM ₁₀ (lb/MMBtu)	0.0092	0.016
VOC (lb/MMBtu)	0.0092	0.0085
Opacity (%)	10	20
Fuel Sulfur (%)	--	0.05

Storage Tank TNK1

Storage tank TNK1 is subject to NSPS Subpart Kb because it was constructed after July 23, 1984 and has a storage capacity greater than 40 m³ (~10,568 gallons). This tank can store up to 1,386,000 gallons of No. 2 fuel oil, which has a true vapor pressure of approximately 0.0074 psi. Based on this approximate vapor pressure, tank TNK1 is only subject to the requirements of 40 CFR 60.116b in accordance with 40 CFR 60.110b(c). [NSPS Kb emission standards apply for tanks the size of TNK1 if the non-water volatiles vapor pressure is at least 0.51 psia.]

- D. Compliance Status: See Section VII.F.
- E. Operational Flexibility: See Section VII.A.
- F. Permit Conditions

Condition 3.3.7 limits the minimum operational capacity of the combustion turbines to 84 megawatts. This is different from the current SIP Condition 10.2, whose limit is based on a percentage, 50%, of the combustion turbines capacity. 84 MW is approximately 50% of the base load capacity.

IV. Testing Requirements (with Associated Record Keeping and Reporting)**A. General Testing Requirements**

Provisions are provided in the permit for any future performance test which may be required to comply with emission limits in Part 3.0. The test methods to be used to determine compliance with the limitations in Part 3 are listed and a general condition requiring notification of any test and submission of a test plan are also provided.

B. Specific Testing Requirements

None.

V. Monitoring Requirements (with Associated Record Keeping and Reporting)

A. General Monitoring Requirements

Condition 5.1.1 requires that all monitors be operated continuously except during breakdowns and repairs. Any repairs or maintenance should be completed in an expeditious manner so downtime is minimized. All data should also be recorded during any calibration activity to help verify that the calibration was performed and completed properly.

B. Specific Monitoring Requirements

The West Georgia Generating facility consists of four combustion turbines subject to the requirements of Subpart GG and one storage tank subject to the requirements of Subpart Kb. The facility was permitted under PSD regulations and BACT, and therefore, has more stringent limits than those in the subparts and limits for pollutants not regulated in the subparts.

The combustion turbines have limits for nitrogen oxides (NO_x), carbon monoxide, particulate matter, volatile organic compounds (VOC), and opacity. Fuel oil combusted in the turbines is limited to 0.05 percent sulfur. The turbines are also subject to the monitoring requirements of the Acid Rain Rule and have nitrogen oxides and oxygen Continuous Emission Monitoring Systems (CEMS). The CEMS are utilized to demonstrate compliance with the nitrogen oxides limits, as defined by BACT and Georgia State Rule 391-3-1-.02(2)(nnn). The facility is subject to BACT limits of 12 ppm for NO_x on an hourly basis (excluding peak firing), and 15 ppm during any 30-day rolling average while firing natural gas. Therefore the federal rule 40 CFR 60 Subpart GG is subsumed.

Since, the facility is located in the counties contributing to the Atlanta non-attainment area and is subject to Georgia Rule 391-3-1-.02(2)(nnn). This rule limits the NO_x emissions to 30 ppm at 15% oxygen, dry basis, during the ozone season. This rule applies because the turbines were permitted prior to April 1, 2000. The rule will take effect May 1, 2003.

Performance tests were conducted on the combustion turbines for NO_x and CO at varied capacities, and particulate matter and opacity at base capacity. NO_x emissions were less than 65% of the allowable emission limit when burning natural gas. CO emissions were less than 5% of the allowable emission limit while firing natural gas. Visible emissions and particulate matter documented no recordable readings or effectively zero while burning natural gas. The following table illustrates the emissions testing results:

Table of Performance Test Results

Unit ID	Fuel Type	NO _x (ppmvd @ 15% O ₂)				CO (ppmvd @ 15% O ₂)		PM ₁₀ (lb/MMBtu)	Opacity (10%)
		85 MW	110 MW	140 MW	Base	110 MW	Base	Base	Base
T001	Natural Gas	7.11	7.67	7.82	7.76	--	0.54	--	0
	Emission Limit	12	12	12	12	15	15	0.0092	10
	No. 2 Fuel Type	40.57	39.23	38.83	30.83	0.86	0.37	0.01	0
	Emission Limit	42	42	42	42	34	20	0.016	20

Unit ID	Fuel Type	NOx (ppmvd @ 15% O ₂)				CO (ppmvd @ 15% O ₂)		PM ₁₀ (lb/MMBtu)	Opacity (10%)
		85 MW	110 MW	140 MW	Base	110 MW	Base	Base	Base
T002	Natural Gas Emission Limit	4.29 12	5.29 12	6.08 12	6.82 12	-- 15	0.12 15	-- 0.0092	0 10
	No. 2 Fuel Type Emission Limit	41.31 42	36.65 42	33.99 42	31.26 42	0.61 34	0.23 20	0.014 0.016	0 20
T003	Natural Gas Emission Limit	No Performance Data Submitted							
	No. 2 Fuel Type Emission Limit	-- 42	-- 42	-- 42	-- 42	0.39 34	0.33 20	-- 0.016	-- 20
T004	Natural Gas Emission Limit	No Performance Data Submitted							
	No. 2 Fuel Type Emission Limit	-- 42	-- 42	-- 42	-- 42	0.1 34	0.09 20	-- 0.016	-- 20

As the results show from the performance tests show, the likelihood that the limit placed on CO emissions will be exceeded is minimal. Similarly, VOC emissions are a function of incomplete combustion and increase as the combustion turbine performance decreases. Therefore, to assure that the facility operates the combustion turbines optimally, thus minimizing the possibility of high CO or VOC emissions, Condition 3.3.7 requires the facility to operate the combustion turbines at or above 84 MW. This output is based on 50% of the base load rating for the GE 7FAs. Therefore, monitoring is required on the megawatts generated by each turbine.

Particulate matter and visible emissions at base load were well below the allowable emission rates. Georgia Rule 391-3-1-.02(2)(b) is subsumed by PSD, therefore the limits are more stringent for the turbines. EPD has determined that the use of natural gas and very low sulfur diesel fuel is unlikely to result in violations of particulate matter or visible emission standards. Therefore, EPD is not imposing monitoring of a visible emission/particulate matter or a surrogate parameter to verify compliance.

VI. Other Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all required information to deviations from applicable requirements.

B. Specific Record Keeping and Reporting Requirements

The turbines are subject to maximum allowable fuel sulfur content of 0.05 percent in accordance with BACT [40 CFR 52.21(j)]. Subpart GG [40 CFR 60.334(b)(2)] requires daily monitoring of the sulfur content and nitrogen content of the natural gas. The facility's existing permit requires that the sulfur content of the natural gas be tracked and recorded on a semi-annual basis. West Georgia Generating will be required to maintain semi-annual analysis certifications, provided by the supplier, for the sulfur content of the natural gas burned in the turbines, and any semi-annual analysis of which shows a sulfur content in excess of 0.8 weight percent must be reported as an excess emission, as defined by subpart GG. Semiannual analysis by the fuel supplier is an alternate fuel sampling frequency for gas turbines subject to Subpart GG and was approved by EPA Region 4; March 31, 1988.

Fuel supplier certifications will be used to monitor fuel sulfur content and a certification by the supplier that the fuel oil meets the specifications for diesel fuel Grades Low sulfur No.1 D or Low Sulfur No. 2-D contained in ASTM D975 is required. Maximum sulfur content of these diesel grades is 0.05% percent, which is much lower than the Subpart GG sulfur limit of 0.8% fuel nitrogen content of the natural gas is exempted by the existing permit. Since the PSD limits for NOx are considerable lower than the calculated Subpart GG limits for each turbine, the NOx emissions allowance for fuel bound nitrogen of Subpart GG standard is irrelevant, therefore no fuel analysis for fuel-bound nitrogen is necessary for fuel oil.

The combined operational hours when firing natural gas or No. 2 fuel oil for the combustion turbines are limited to 4,760 hours per turbine. There is also a secondary limit of 1,687 hours of operation when firing No. 2 fuel oil on each combustion turbine. Also limiting the operation of the combustion turbines when firing fuel oil is a consumption limit of 93,500,00 gallons per year for the facility. In order to comply with these conditions, the facility must keep records of operation of the turbines and what type of fuel is being fired. The facility must also keep usage records of the No. 2 fuel oil on an annual basis.

The facility is also required to record the mass emissions rate of NOx (lb/hr) from each combustion turbine. This is performed to keep an accurate record of the amount of NOx that is emitted by the turbines.

A record of the amount of fuel oil used at the facility must be maintained to verify compliance with the annual limit placed on the facility. The fuel oil supplier must also provide certification of the sulfur content of the fuel oil. This is to be done for each shipment or fuel oil for the facility, and the certifications must be kept available for inspection of submittal.

For the fuel storage vessel, TNK1, the facility shall keep records showing the dimensions of the tank according to 40 CFR 60 Subpart Kb. Also, records must be kept of the current capacity in the tank. These records have to be available for inspection or submittal to EPD for the life of the tank.

VII. Specific Requirements

A. Operational Flexibility

This permit includes the standard conditions allowing 502(b)(10) changes and off-permit changes. Additional operational flexibility provisions do not need to be incorporated into this Title V Permit as their permit already provides sufficient flexibility for the facility. The applicant did not include any alternative operating scenarios in their Title V Application.

B. Alternative Requirements

There are no alternative requirements that need to be incorporated into the Title V Permit.

C. Insignificant Activities

A list of insignificant activities in existence at the facility at the time of the permit issuance is attached at the end of the Title V Permit. These insignificant emissions units may also be in section 4.10 and 4.50 of the Title V application.

D. Temporary Sources

This section does not apply to the facility. 40 CFR 70.6(e) requires Georgia EPD to provide the permitting of certain types of temporary sources. This facility has no such sources and is unlikely to have such sources in the future. However, the facility may add such sources as long as they follow the proper regulatory procedures for the addition of such sources. This may mean amending the Title V Permit.

E. Short-Term Activities

The facility is not requesting to operate any short-term activities.

F. Compliance Schedule/Progress Reports

This facility is in compliance with all Air Quality Regulations. Therefore, no compliance schedule or progress reports are necessary.

G. Emissions Trading

The facility is not involved in any emissions trading programs other than the Acid Rain Programs.

H. Acid Rain Requirements

The facility is subject to requirements in Title IV of the Clean Air Act. They are subject to 40 CFR 72 (permits), 73 (sulfur dioxide), and 75 (monitoring). They are not subject to the nitrogen oxide provisions (40 CFR 76) of the Acid Rain regulations, because the turbines do not have the ability to burn coal.

West Georgia Generating submitted a separate Phase II Permit Application (Application No. 12152, dated March 21, 2000) to satisfy the requirements of 40 CFR 72.30(b)(2). 40 CFR 72.50(a)(1) allows a complete Phase II Permit Application to be attached to the Title V Permit as part of the Permit. West Georgia Generating's Phase II Permit Application is attached to the Title V Permit as part of the Permit to ensure that all Acid Rain applicable requirements are incorporated into the Title V Permit.

H. Prevention of Accidental Releases

This facility is subject to the requirements of 40 CFR 68.

I. Stratospheric Ozone Protection Requirements

The standard permit condition pursuant to 40 CFR 82 Subpart F has been included in the Title V Permit. These Title VI requirements apply to all air conditioning and refrigeration units containing ozone-depleting substances regardless of the size of the unit or of the source. Since West Georgia Generating has air conditioners, chillers, and refrigerators, Subpart F is an applicable requirement.

J. Pollution Prevention

There are no pollution prevention provisions incorporated into this Title V Permit.

K. Specific Conditions

Not applicable.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Addendum to Narrative

The 30-day public comment period for the draft Title V permit for the West Georgia Generating Company, LLC, in Thomaston, Georgia ended on August 30, 2002. On August 30 and September 4, 2002, the Division received comments from the Georgia Chapter of the Sierra Club, and on July 28 and September 3, 2002, the West Georgia Generating Company, LLC, owner and operator of the facility, submitted comments. The comments are summarized and addressed below:

SIERRA CLUB MAILED ON AUGUST 28, 2002
GENERAL COMMENTS***1.1) THE PERMIT MUST REQUIRE THE PERMITTEE TO SUBMIT ALL MONITORING INFORMATION TO EPD***

According to 40 CFR § 70.6(a)(3)(iii)(A) and 42 U.S.C. § 7661(c)(a), permits issued by state agencies must require the permittee to submit reports containing all monitoring data at least every 6 months.

The Sewell Creek Energy Facility permit does not require the reporting of all excess emissions, exceedances and excursions. The reporting of such deviations is in fact required by § 70.6(a)(iii)(B), whereas § 70.6(a)(iii)(A) requires reporting of all monitoring. The Sewell Creek Energy facility is not obliged to submit records of the remaining continuous monitoring systems required under section 5.2.

Section 5.3.1 should be amended to require submission of the records of all data and information required by the preceding conditions, at least semiannually. This requirement should apply first and foremost to Condition 5.2.4, which involves adjustments to decrease excessive nitrogen oxide concentrations.

EPD Response:

The section of the United States Code cited by the commenter requires that the Permittee submit, no less than every six months, results of any required monitoring. CFR Chapter 40, Part 70.6(a)(3)(iii) and Georgia Rule 391-3-1-.03(10)(d)1.(i), which codifies this federal requirement, require the submittal, at least every six months, of reports of any required monitoring. These citations do not require the submittal of copies of all monitoring data recorded by the Permittee, as is implied by the final line of the comment above; rather, they require submittal of reports on the results of this monitoring. The conditions within the draft permit are sufficient to meet these requirements. Note that Condition 5.3.1, noted in the comment above, is not a general reporting requirement meant to satisfy the requirements of §70.6(a)(3)(iii)(A).

The EPA has noted in a July 7, 1993 document entitled "Questions and Answers on the Requirements of Operating Permits Program Regulations" that the Permittee is not required to submit raw data on monitoring/testing as part of its monitoring reports. The Permittee is required to keep required monitoring data and support information. Support information includes all calibration and maintenance records for continuous monitoring, and copies of all reports required by the permit. Reports are required to contain the results of the monitoring required in the permit.

For further information, please see the formal response from EPA to the Sierra club related to this issue, an excerpt of which is included here for reference purposes:

"40 CFR Part 70 does not specify what form the monitoring report must take. Although the semi-annual monitoring reports required by EPD focus on the reporting of deviations, one can conclude that the monitoring results which are not reported as deviations are considered to be in compliance with the

applicable permit terms or conditions by definition. This interpretation is further supported by the fact that EPD still requires reports stating that there were no deviations when there were, in fact, no deviations for a given reporting period. EPD's permits include considerable detail regarding what must be included in a semi-annual monitoring report."

[Letter from Winston A. Smith, Director, Air Pesticide and Toxics Management Division, US EPA, to Robert Ukeily, Counsel for the Sierra Club, dated March 29, 2002]

1.2) *THE PERMIT CANNOT LIMIT CREDIBLE EVIDENCE FROM BEING USED IN AN ENFORCEMENT ACTION*

As emphasized by the United States Environmental Protection Agency's (EPA) Credible Evidence Rule, 62 FR 8314 (Feb. 24, 1997), the Clean Air Act (CAA) allows the public, EPD, EPA, and the regulated facility to rely upon any credible evidence to demonstrate violations of or compliance with the terms and conditions of a Title V operating permit. Specifically, EPA revised 40 CFR § 51.212, 51.12, 52.30, 60.11 and 61.12 to "make clear that enforcement authorities can prosecute actions based exclusively on any credible evidence, without the need to rely on any data from a particular reference test" [62 FR at 8316]. EPD must ensure that no permit purports to limit the use of credible evidence. Moreover, the permit should include standard language stating that all credible evidence may be used.

A. *EPD Must Modify Statements that Purport to Limit Credible Evidence*

EPD must ensure that its Title V permits contain no language that could be interpreted to limit credible evidence. For example, condition 4.1.3. in Bainbridge Power Facility's permit states that "[t]he methods for the determination of compliance with emission units listed under Sections 3.2, 3.3, 3.4 and 3.5 which pertain to the emission units listed in Section 3.1 are as follows:" One could read this provision to stand for the proposition that when a government agency or member of the public takes an enforcement action for a permittee violating its permit, the enforcer can only rely on information from the methods of determination listed in the permit. This position is directly contrary to the Clean Air Act requirements in CAA §§ 113(a), 113(e)(1) and 40 CFR § 51.212, 51.12, 52.30, 60.11 and 61.12 which allow anyone taking an enforcement action to rely on any credible evidence. Therefore, the aforementioned sentence in Section 4.1.3 should be stricken.

Another example of the permit's attempt to limit credible evidence is found in the second sentence of condition 8.17.1. This condition claims to limit usable evidence to information that is available to EPD. Of course, the public or EPA may obtain information about a facility from sources other than EPD such as information from a "whistleblower" or from people that live near the facility. As such, it is inappropriate to limit credible evidence to exclude such information. Therefore, the aforementioned provision must be removed from the permit. Of course, the preferred option is to simply remove the sentence. A less desirable option is to re-write it to state that "EPD may determine . . ."

Similarly, Condition 6.1.3 of the permit states that "failures shall be determined through observation, data from any monitoring protocol, or by any other monitoring which is required by the permit." This provision could be considered to limit the use of credible evidence. To correct the problem, this condition should also mention any credible as a basis for determining failures.

B. *EPD Should Include Standard Language in the Permit that Explicitly States that Anyone Can Use Any Credible Evidence*

The permit does not affirmatively state that any credible evidence may be used in an enforcement action. EPA supports the inclusion of credible evidence language in all Title V permits. As explained by the Acting Chief of US EPA's Air Programs branch [letter from Cheryl L. Newton, Acting Chief of US EPA's Air Branch, EPA, to Robert F. Hobanbosi, Chief, Division of Air Pollution Control, Ohio Environmental Protection Agency, dated October 30, 1998]:

It is the United States Environmental Protection Agency's position that the general language addressing the use of credible evidence is necessary to make it clear that despite any other language contained in the permit, credible evidence can be used to show compliance or noncompliance with applicable requirements. . . . [A] regulated entity could construe the language to mean that the methods for demonstrating compliance specified in the permit are the only methods admissible to demonstrate violation of the permit terms. It is important that Title V permits not lend themselves to this improper construction.

In fact, EPA apparently sent a letter in May 1998 specifically directing EPD to amend its SIP to include language clarifying that any credible evidence may be used. Nevertheless, while three years have elapsed since EPA's request, the permit does not contain the necessary language.

While anyone may rely on all credible evidence regardless of whether this condition appears in the permit, EPD should include credible evidence language in the permits and permit template to make the point clear. Specifically, EPA has recommended that the following language be included in all Title V permits [Letter from Stephen Rothblatt, Acting Director, Air and Radiation Division, US EPA, to Paul Deubenetzky, Indiana Department of Environmental Management, dated July 28, 1998]:

Notwithstanding the conditions of this permit that state specific methods that may be used to assess compliance or noncompliance with applicable requirements, other credible evidence may be used to demonstrate compliance or noncompliance.

*We request that EPD include this provision in the permit to clarify the availability of any credible evidence to demonstrate noncompliance with permit requirements. **Section 8.23.1 does not resolve this issue. This section is incoherent and unintelligible.***

EPD Response:

EPD believes this issue has been previously addressed and resolved. However, in order to review a partial history of this issue, an excerpt from the US EPA's formal response to this topic is included here:

“For clarification purposes, Condition 4.1.3 identifies the required reference methods to be used to satisfy any testing requirements; it is not intended, in any way, to limit the use of credible evidence. In fact, Condition 4.1.3 allows the use of all credible evidence and information. Georgia Rule 391-3-1-.02(3)(a), which serves as the underlying authority for Condition 4.1.3, references EPD's *Procedures for Testing and Monitoring Sources of Air Pollutants*, which permits the use of all credible evidence. Section 1.3(g) of this document states that “nothing. . . shall preclude the use, including the exclusive use, of any credible evidence or information.” Both the rule and referenced procedures are approved parts of Georgia's State Implementation Plan (SIP). Although the language in Condition 6.1.3 may appear to limit the use of credible evidence, EPA believes that this was not the intention of EPD and that such language does not ultimately limit the use of credible evidence because the Georgia SIP expressly prohibits such an exclusion.

Nonetheless, for further clarification, EPD has added a general condition to the permit template which expressly states that nothing shall preclude the use of any credible evidence. This will ensure that such language will be included in the title V permits issued or renewed in the future by EPD.”

[Letter from Winston A. Smith, Director, Air Pesticide and Toxics Management Division, US EPA, to Robert Ukeily, Counsel for the Sierra Club, dated March 29, 2002]

1.3) CONDITION 8.15.1 IS NOT ONLY ENFORCEABLE BY THE STATE

Condition 8.15.1 is labeled as enforceable only by the state. However, this is actually a federal requirement contained in 42 U.S.C. § 7423. Therefore, this Condition should not be labeled as state only enforceable condition.

EPD Response:

42 U.S.C. § 7423, titled “Stack Heights”, does not relate to the circumvention of applicable standards which is the topic of Condition 8.15.1. Regardless, Condition 8.15.1 is directly from the Georgia Air Quality Rules. It is not part of Georgia’s SIP nor is it an applicable federal regulation. Therefore, it has been appropriately classified as a State Only Enforceable condition.

1.4) GENERAL CONDITIONS WITHOUT SPECIFIC MONITORING AND REPORTING REQUIREMENTS ARE NOT ENFORCEABLE.

Conditions 8.18.1 and 8.19.3 restrict opacity as required by Georgia Rules of Air Quality 391-3-1-.02(2)(b)1 and 391-3-1-.02(2)(d); and conditions 8.19.1, 8.19.2, and 8.21.1 restrict particulate matter emissions as required by Rules 391-3-1-.02(2)(d) and 391-3-1-.02(2)(e). These permit conditions are not enforceable as a practical matter because they do not identify particular emission units to which these requirements apply. Furthermore, it is not clear how these conditions are monitored. The permit should state explicitly to which emission units these conditions apply and how they are to be monitored and reported. Otherwise, such general conditions are not enforceable as a practical matter.

EPD Response:

All significant emission units are listed in Table 3.1 of the permit and their applicable emission limits and/or standards are contained in Sections 3.2, 3.3, and 3.4 of the permit. Any applicable monitoring and recordkeeping are in Sections 5.1, 5.2, 6.1, and 6.2 and have been explained in the permit narrative. Conditions 8.18.1, 8.9.1, 8.19.2, 8.19.3, and 8.21.1 are primarily intended to address non-significant emission units that may be listed in Appendix B of the permit. EPD has determined that no monitoring is necessary to provide reasonable assurance of compliance for these requirements.

SPECIFIC COMMENTS

2.1) ALL POLLUTION CONTROL DEVICES SHOULD APPEAR IN THE TABLE OF EMISSION UNITS.

*The table of emission units in section 3.1 of the draft permit contains ‘None’ and ‘N/A’ in the columns under AIR POLLUTION CONTROL DEVICES. The corresponding table in the permittee’s narrative lists **Dry Low NOx Burners and Water Injection** as devices installed on the four combustion turbines to reduce the NOx formation. These devices are required by Condition 3.3.8 in the draft permit, and the performance, and the performance tests for NOx emissions reported under section V.B in the narrative have obviously been*

performed with these control devices in place. To prevent ambiguity, they ought to be included in section 3.1 of the permit under AIR POLLUTION CONTROL DEVICES.

EPD Response:

The control device technologies have been added to Section 3.1 for clarification purposes. However, it is important to note that dry low NO_x burners are not control devices under 40 CFR 64.

2.2) FUEL OIL ALLOWANCE SHOULD BE REDUCED

According to section 3.3.5.b, each of the four turbines is allowed emissions of no more than 12 ppmvd of nitrogen oxides, corrected to 15 percent oxygen, except under peak firing conditions.

According to section 3.3.6.a, the corresponding limit when firing fuel oil is 42 ppmvd.

According to section 1.3, the four turbines use fuel oil only "as the backup." The front pages of the draft permit also refers to the fuel oil as contributing to the Atlanta Regional Nonattainment area, the permit should not allow as many as 1,687 hours of firing fuel oil (see section 3.3.4) out of a total of 6,447 hours of operation (4,760 hours of firing natural gas [section 3.3.3] plus the 1,687 hours of fuel oil).

The fuel oil allowance of 93,500,000 gallons during any twelve month consecutive months (Condition 3.3.3) should be reduced as well.

EPD Response:

The emission limits and operating limits were approved by the U.S. EPA and the Division as part of the PSD permit issued on June 7, 1999.

2.3) MINIMUM OPERATIONAL CAPACITY OF TURBINES SHOULD BE RAISED.

This comment is related to the preceding one.

Condition 3.3.7 requires the permittee not to operate any of the combustion turbines below 84 megawatts. According to section F of the narrative, this is supposed to represent "approximately 50% of the base load capacity". The front page of the draft permit states that each turbine is rated at 167 MW when fired with natural gas. The narrative states that "[e]ach unit generates 175 MW when fired with No. 2 fuel oil" (section D.3)

If the permittee is allowed to fire fuel oil up to 1,687 hours, then a minimum of 84 megawatts is inadequate, since it represents less than 50%. Note also that condition 3.3.6.b in the draft permit uses 113 megawatts as the cutoff for CO emissions from fuel oil (34 ppmvd below 113 megawatts, 20 ppmvd at or above 113 megawatts).

EPD Response:

The Division agrees that the minimum megawatts allowed in Condition 3.3.7 should be raised to from 84 megawatts to 87.5 megawatts, which is 50% of the maximum possible capacity for the combustion turbines. The maximum possible capacity for the combustion turbines is 175 megawatts while firing fuel oil versus 167 megawatts while firing natural gas.

2.4) RESTRICTIONS ON EMISSIONS OF NITROGEN OXIDES ARE QUESTIONABLE

Condition 3.3.5 sets limits on nitrogen oxides emissions from each of the four turbines when firing natural gas. Paragraph (b) sets a limit of 12 ppmvd, corrected to 15 percent oxygen, "except under peak firing conditions". Paragraph (a) reinforces the exception by setting a higher 30-day average. The two paragraphs refer to 40 CFR 52.21(j) and 40 CFR 60.332(a)(1). We have been unable to find a special allowance for "peak firing conditions" in the cited regulations.

EPD Response:

'Peak firing conditions' refers to combustion turbine operations above base load operating levels. EPD and the U.S. EPA agreed upon the limits placed on the combustion turbines while firing natural gas during the PSD analysis. Language was added in Condition 3.3.5.b to define peak firing conditions.

2.5) OPACITY SHOULD BE MONITORED AND REPORTED

Conditions 3.3.5.f and 3.3.6.e restrict the opacity of visible emission from the four turbines to 10% when firing natural gas and 20% when firing fuel oil. The draft permit does not contain any monitoring or reporting requirement to enforce these restrictions. The narrative presents results of performance tests where opacity was nonexistent when firing natural gas as well as fuel oil. Nevertheless, to assure compliance, the permit should require at least periodic monitoring and reporting, at the very least while firing fuel oil, for there are situations in which combustion turbines could exceed their opacity limits when firing fuel oil.

EPD Response:

In restricting the facility to burning the clean burning fuels, natural gas and distillate oil, the Division regards the likelihood that the opacity will ever be exceeded is minimal. Therefore, requiring the facility to place monitoring or reporting to assure compliance is unnecessary.

2.6) SECTION 112(r) PROBLEM.

Condition 7.10.1 is to apply "when and if the requirements of 40 CFR Part 68 become applicable." In order to make the permit enforceable as a practical matter, the permit must state whether Section 112(r) applies. See IN THE MATTER OF KINGS PLAZA, ORDER RESPONDING TO PETIONER'S REQUEST TO OBJECT, Petition No.: II-2003-03, at pp. 30-31, Issue 5.

EPD Response:

Condition 7.10.1 does not need to be changed.

2.8) THE LIST OF ABBREVIATIONS IS INCOMPLETE.

The abbreviations "ppmvd" should be included in the list of abbreviations under Attachment A.

EPD Response:

EPD has agreed to add ppmvd to the List of Abbreviations.

SIERRA CLUB COMMENT MAILED ON AUGUST 30, 2002

The comment from the Sierra Club requested that the cover page of the permit be changed to reflect that Mirant is the parent/holding company. This information is from Mirant's 2001 Environmental, Safety and Health Annual Report.

EPD Response:

The Title V application defines the owner of the facility as West Georgia Generating Company, LLC. This company is set up as a limited liability corporation underneath Mirant Corporation. Mirant is named as the parent company of the owner and operator of the facility's owner is Section 1.3 of the Title V permit. To further clarify the owner of the facility, Mirant will be named parenthetically on the cover page of the Title V permit as the owner of the West Georgia Generating Company, LLC.

WEST GEORGIA GENERATING COMMENTS MAILED ON JULY 28, 2002**Summary Comment 1 and 2:**

The Title Page refers to the distillate tank as "a 1.3 million-gallon tank" and Section 1.3 refers to the tank as a 1.386 M-gallon tank. The tank should be a 1.382 million-gallon tank.

EPD Response:

The Division agrees and the appropriate changes were made.

Comment 3 and 6:*3.3.7 – Page 5*

Condition 3.3.7 prohibits combustion turbine operations below 84 MW except for undefined periods of startup and shutdown.

The ability to tune the advanced technology Dry Low NO_x (DLN) combustion turbines through the various firing modes, including modes at loads below 84 MW, is essential for optimization of combustion dynamics, emissions and flame stabilization. The current operating permit (Permit 4911-293-0027-P-01-1), contains Special Condition 10.2 which authorizes turbine operations below 50% of their rated capacity for two consecutive hours, giving the facility the flexibility to conduct combustion tuning. While tuning of the units is conducted at higher loads (above 84 MW), major maintenance procedures and seasonal atmospheric changes require periodic tuning throughout the load range. This low load tuning is not optional.

Consideration should be given to a Title V permit condition that authorizes periodic low load combustion turbine operations for Dry Low NO_x tuning events.

6.1.7(c)(i) – Page 13

Condition 6.1.7(c)(i) defines excursions as "any one-hour period during which the average megawatt output from combustion turbines T001, T002, T003 and T004 is less than 84 megawatts."

See previous comment and request regarding low load DLN combustion tuning under section 3.3.7.

EPD Response:

The Division agrees and changes will be made to allow for operation below the indicated level for no more than two consecutive hours.

Comment 4:*3.4.1 – Page 5*

By virtue of the NO_x limit (30ppm at 15% oxygen), Condition 3.4.1 prohibits the firing of distillate fuel oil during the period May 1 through September 30 of each year.

In the interest of maintaining reliability, consideration should be given to a permit condition which authorizes operations on liquid fuel during these summer months in the event of an emergency such as a gas curtailment, pipeline rupture or some other event that would temporarily prevent the firing of natural gas.

EPD Response:

The Georgia Rule 391-3-1-.02(2)(nnn) requires that the facility meet the limitation of 30 ppm at 15% oxygen during the ozone season (May 1 to September 30 of each year). If the facility is unable to do this under current operating methods, then the appropriate control measures should be added onto the facility. While the Division understands the desire to maintain reliability at the facility, the Rule still stands and no exemption will be given for emergencies.

Comment 5:

6.1.7(b)(i) – Page 12

Condition 6.1.7(b)(i) defines an exceedance as “any one-hour period during which the average NOX emissions from any combustion turbine, T001, T002, T003, and T004, while firing natural gas, are equal to or greater than 12 ppmvd, corrected to 15% oxygen, except under peak firing conditions.”

What is meant by “peak firing conditions?”

EPD Response:

‘Peak firing conditions’ refers to operating condition above base load.

Comment 7:

6.2.3 – Page 13

Condition 6.2.3 requires West Georgia to obtain a statement (that the oil complies with certain ASTM specifications) from the fuel supplier for each shipment of fuel oil received onsite.

Is “shipment” defined in this instance as each lot of fuel or each shipment from a terminal, bulk storage tank, or pipeline? The assumption here is that “shipment” does not mean each individual tanker truck load delivered to the facility.

EPD Response:

The Division has determined that a fuel shipment is the quantity of fuel listed on the invoice that a facility receives from a fuel supplier. The invoice which a facility receives from a supplier typically shows the total quantity of fuel delivered during a relatively short time period of one day or less. The determination was made that documentation of the properties of the fuel in each delivery container (i.e., truck, railcar, etc) was not necessary and a certification by the fuel supplier of the properties of the quantity of fuel shown on an invoice was sufficient documentation of fuel properties such as sulfur content, Btu content, etc.

WEST GEORGIA GENERATING COMMENTS MAILED ON JULY 28, 2002

Company Comment

West Georgia Generating Company stated that it will not be possible to comply with Condition 5.1.1 as written because “these monitoring systems cannot be calibrated and maintained or repaired while monitoring and recording stack emissions data” and because “they are not capable of recording actual emissions data while calibration gases are flowing through the system or while being serviced or repaired.”

The company requested changes to the language of the condition.

EPD Response:

The company has misinterpreted the language and requirements of Condition 5.1.1. The condition does not require that pollutant emission data be recorded during periods when the Continuous Monitoring System (CMS) is being maintained or repaired or during periods when the CMS is being calibrated. Condition 5.1.1 requires that data are recorded “except for continuous monitoring system breakdowns and repairs”; therefore, emissions data are not required to be recorded during periods of CMS breakdowns and repairs.

Additionally, the requirement that data be recorded during calibration checks and zero and span check pertains to the recording of CMS output (i.e., calibration data, zero and span check data) during periods when calibration gases are injected into the CMS. The purpose of this requirement is to provide a record of calibrations and any needed zero and span adjustments. Condition 5.1.1 does not require that the CMS measure and record pollutant emission data during calibration periods or periods when zero and span adjustments are being made. The Division is well aware that a CMS cannot measure pollutant emissions and undergo a calibration simultaneously.

No change should be made to Condition 5.1.1.