



North Carolina Department of Environment and Natural Resources
Division of Air Quality

Michael F. Easley, Governor

William G. Ross, Jr., Secretary
B. Keith Overcash, P.E., Director

September 21, 2007

Mr. Terrence Ryan
Vice President, Asset Management
North Carolina Electric Membership Corporation
3400 Sumner Boulevard
Raleigh, North Carolina 27616

SUBJECT: Air Quality Permit No. 09488R03
Facility ID: 7700082
ORIS code: 56292
North Carolina Electric Membership Corporation - Hamlet Plant
Hamlet, North Carolina
Richmond County
Fee Class: Title V

Dear Mr. Ryan:

In accordance with your completed Permit Application received June 4, 2007, we are forwarding herewith Air Quality Permit No. 09488R03 to the North Carolina Electric Membership Corporation – Hamlet Plant, located at 162 Cooperative Way, Hamlet, North Carolina, authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503 have been listed for informational purposes as an "ATTACHMENT."

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with **both** the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding.

Permitting Section
1641 Mail Service Center, Raleigh, North Carolina 27699-1641
2728 Capital Blvd., Raleigh, North Carolina 27604
Phone: 919-715-6235 / FAX 919-733-5317 / Internet: www.ncair.org

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You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of GS 143-215-108(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive and Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108 and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

The total nitrogen dioxide emissions have increased by 56.16 pounds per hour since the baseline date was triggered. Total sulfur dioxide emissions have increased by 14.57 pounds per hour since the baseline date was triggered. Total particulate emissions (including PM10) have increased by 19.77 pounds per hour since the baseline date was triggered.

This Air Quality Permit shall be effective from **September 21, 2007** until **January 31, 2010**, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. The Phase II Acid Rain permit requirements shall be effective from January 1, 2007 until December 31, 2011.

The changes made to the permit are summarized in the attachment to this letter. Should you have any questions concerning this matter, please contact Booker T. Pullen, E.I.T. at (919) 715-6248.

Sincerely yours,

Donald R. van der Vaart, Ph.D., P.E.
Chief

Attachments

c: Fayetteville Regional Office
Central Files

Attachment A:

Changes made to the NCEMC (Hamlet Plant) existing Air Permit per application 7700082.07A:

Old Page No.	New Page No.	Condition No.	Changes
Page 1	Page 1	Cover letter	Changed date of cover letter, changed permit revision number, changed name of responsible official, changed complete application received date
Page 2	Page 2	Cover letter	Changed date of letter, changed effective date of permit, removed "Connie Horne" from copy list
Page 3	Page 3	Cover letter	Revised the "changes to the permit" table to reflect the changes per application 7700082.07A
Body of the Permit			
Page 1	Page 1	Cover page	Changed permit revision number, changed issue date, changed effective date, changed "Replaces permit" revision number
All pages	All pages	Header	Revised Permit to R03
Page 2	Page 2	Specific Limitations and Limitations	Revised complete application number and received date, removed 2D.0501(e) requirements from this page and combined them with the requirements on page 7, item 8
Page 3	Page 3	Specific Limitations and Limitations	Removed turbines ES1-A, ES1-B, ES2-A, ES2-B, ES3-A, ES3-B, ES4-A, ES4-B, ES5-5, ES5-B from condition 2D .0516, Specific Condition A.3
Page 6	Page 6	Specific Limitations and Limitations	Removed "and control efficiency" from paragraph, in Condition A.6.b. of the existing permit Revised the paragraph per application request for Condition A.6.c.i. of the existing permit Revised the paragraph per application request for Condition A.6.c.ii. of the existing permit
Page 7	Page 7	Specific Limitations and Limitations	Revised the definition of "Startup and Shutdown" in Condition A.8.a.
Page 11	Page 11	Signature Page	Changed issue date, changed permit revision

Attachment B

NCEMC – Hamlet Plant, Air Permit No. 09488R03:

Activities Exempted from Permitting Under 15A NCAC 2Q .0503(8)

ID No.	Emission Source Description	Exemption Regulation
IES-11	One 500,000 gallon fuel oil storage tank	Potential to emit less than 5.0 tons per year of a single criteria pollutant and less than 1000 pounds of HAPs per year
IES-12	One 500,000 gallon fuel oil storage tank	
IES-13	One natural gas-fired heater (2.0 million Btu per hour heat input)	

1. Because an activity is exempted from being required to have a permit or permit modification does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 2Q .0711 or 2D .1100.
3. Applicant requested a list of those regulations that the sources would otherwise be subject to if not exempt.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF AIR QUALITY

AIR PERMIT NO. 09488R03

Issue Date: September 21, 2007

Effective Date: September 21, 2007

Expiration Date: January 31, 2010

Replaces Permit: 09488R02

To construct and operate air emission source(s) and/or air cleaning device(s), and for the discharge of the associated air contaminants into the atmosphere in accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina (NCGS) as amended, and other applicable Laws, Rules and Regulations,

North Carolina Electric Membership Corporation
Hamlet Plant
162 Cooperative Way
Hamlet, Richmond County, North Carolina
Fee Class: Title V
Site Number: 77/00082
ORIS code: 56292

(the Permittee) is hereby authorized to construct and operate the air emissions sources and/or air cleaning devices and appurtenances described below:

- NSPS** 1. One Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbine equipped with water injection and an oxidation catalyst system (300 million Btu per hour nominal heat input capacity when firing natural gas, and 281 million Btu per hour nominal heat input capacity when firing No. 2 fuel oil, ID No. ES1-A), and one generator,
- NSPS** 2. One Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbine equipped with water injection and an oxidation catalyst system (300 million Btu per hour nominal heat input capacity when firing natural gas, and 281 million Btu per hour nominal heat input capacity when firing No. 2 fuel oil, ID No. ES1-B), and one generator,
- NSPS** 3. One Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbine equipped with water injection and an oxidation catalyst system (300 million Btu per hour nominal heat input capacity when firing natural gas, and 281 million Btu per hour nominal heat input capacity when firing No. 2 fuel oil, ID No. ES2-A), and one generator,
- NSPS** 4. One Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbine equipped with water injection and an oxidation catalyst system (300 million Btu per hour nominal heat input capacity when firing natural gas, and 281 million Btu per hour nominal heat input capacity when firing No. 2 fuel oil, ID No. ES2-B), and one generator,

- NSPS** 5. One Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbine equipped with water injection and an oxidation catalyst system (300 million Btu per hour nominal heat input capacity when firing natural gas, and 281 million Btu per hour nominal heat input capacity when firing No. 2 fuel oil, ID No. ES3-A), and one generator,
- NSPS** 6. One Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbine equipped with water injection and an oxidation catalyst system (300 million Btu per hour nominal heat input capacity when firing natural gas, and 281 million Btu per hour nominal heat input capacity when firing No. 2 fuel oil, ID No. ES3-B), and one generator,
- NSPS** 7. One Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbine equipped with water injection and an oxidation catalyst system (300 million Btu per hour nominal heat input capacity when firing natural gas, and 281 million Btu per hour nominal heat input capacity when firing No. 2 fuel oil, ID No. ES4-A) and one generator,
- NSPS** 8. One Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbine equipped with water injection and an oxidation catalyst system (300 million Btu per hour nominal heat input capacity when firing natural gas, and 281 million Btu per hour nominal heat input capacity when firing No. 2 fuel oil, ID No. ES4-B) and one generator,
- NSPS** 9. One Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbine equipped with water injection and an oxidation catalyst system (300 million Btu per hour nominal heat input capacity when firing natural gas, and 281 million Btu per hour nominal heat input capacity when firing No. 2 fuel oil, ID No. ES5-A) and one generator,
- NSPS** 10. One Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbine equipped with water injection and an oxidation catalyst system (300 million Btu per hour nominal heat input capacity when firing natural gas, and 281 million Btu per hour nominal heat input capacity when firing No. 2 fuel oil, ID No. ES5-B) and one generator.

in accordance with the completed application (**No. 7700082.07A**) received **June 4, 2007** including any plans, specifications, previous applications, and other supporting data, all of which are filed with the Department of Environment and Natural Resources, Division of Air Quality (DAQ) and are incorporated as part of this permit.

This permit is subject to the following specified conditions and limitations including any TESTING, REPORTING, OR MONITORING REQUIREMENTS:

A. SPECIFIC CONDITIONS AND LIMITATIONS

1. Any air emission sources or control devices authorized to construct and operate above must be operated and maintained in accordance with the provisions contained herein. The Permittee shall comply with applicable Environmental Management Commission Regulations, including Title 15A North Carolina Administrative Code (NCAC), Subchapter 2D .0501(e), .0516 .0521, .0524 (NSPS Subpart KKKK), .0535, .1100, .1418, and 2Q .0317 (15A NCAC 2D .0530).

2. As required by 15A NCAC 2D .0516 "Sulfur Dioxide Emissions from Combustion Sources," sulfur dioxide emissions from natural gas-fired heater (ID No. IES-13) shall not exceed 2.3 pounds per million Btu heat input.
3. As required by 15A NCAC 2D .0521 "Control of Visible Emissions," visible emissions from the combustion turbines (ID Nos. ES1-A, ES1-B, ES2-A, ES2-B, ES3-A, ES3-B, ES4-A, ES4-B, ES5-A, ES5-B), and the natural gas-fired heater (ID No. IES-13) manufactured after July 1, 1971, shall not be more than 20 percent opacity each when averaged over a six-minute period, except during startup, shutdowns, and malfunctions approved according to procedures set out in 15A NCAC 2D .0535. However, six-minute periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.
4. 15A NCAC 2D .0524 "New Source Performance Standards"
 For the combustion turbines (ID Nos. ES1-A, ES1-B, ES2-A, ES2-B, ES3-A, ES3-B, ES4-A, ES4-B, ES5-A, ES5-B), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart KKKK, including Subpart A "General Provisions."
 - a. NSPS Emissions Limitations - As required by 40 CFR 60.4320 and 60.4330, the following permit limits shall not be exceeded:

Affected Facility	Pollutant		Emission Limit
Combustion turbines (ID Nos. ES1-A, ES1-B, ES2-A, ES2-B, ES3-A, ES3-B, ES4-A, ES4-B, ES5-A, ES5-B,	Sulfur dioxide		0.060 lb/mmBtu
	Nitrogen oxides	No. 2 fuel oil	74 ppm at 15 percent O ₂ (4-hour rolling average)
		Natural gas	25 ppm at 15 percent O ₂ (4-hour rolling average)

- b. NSPS Performance Testing – The combustion turbines (ID Nos. ES1-A, ES1-B, ES2-A, ES2-B, ES3-A, ES3-B, ES4-A, ES4-B, ES5-A, ES5-B), shall be tested as follows:

An initial performance test shall be performed for nitrogen oxides as required by §60.8 and §60.4400. The nitrogen oxide performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load as required by §60.4400(b). Separate performance testing is required for each fuel. Three separate test runs must be conducted for each performance test with a minimum time of 20 minutes per run. In accordance with §60.4400(b)(3), the continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired when burning a fuel that requires water injection for compliance must be operated concurrently with each EPA method 20 or Method 7E test run and must be used to establish the acceptable values of fuel consumption and water to fuel ratio necessary to comply with the applicable NO_x emission limit.

- i. At least 45 days prior to performing the required emissions testing, the Permittee shall submit a testing protocol to the Regional Supervisor, DAQ for review and approval. The testing protocols must be approved by the DAQ prior to performing such tests.
 - ii. All performance tests shall be conducted in accordance with EPA Reference Methods, contained in 40 CFR 60, Appendix A. The EPA Administrator retains the exclusive right to approve equivalent and alternative test methods, continuous monitoring procedures, and reporting requirements.

- iii. Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the initial start-up of the affected facility, the Permittee shall conduct the required performance test(s) and submit a written report of the test(s) to the Regional Supervisor, DAQ.
- iv. To afford the Fayetteville Regional Supervisor, Division of Air Quality, the opportunity to have an observer present, the Permittee shall provide the Regional Office in writing, at least 30 days prior notice of any required performance test.
- v. All associated testing costs are the responsibility of the Permittee.

c. NSPS Monitoring/Recordkeeping

- i. The Permittee must operate and maintain the stationary combustion turbines, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction in accordance with §60.4333.
- ii. The Permittee must install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbines when burning a fuel that requires water injection for compliance in accordance with §60.4335.
- iii. As an alternate to monitoring the total sulfur content of the fuel combusted in the turbines, the Permittee must use one of the following methods to demonstrate compliance with the sulfur dioxide emission limit:
 - A. Demonstrate that the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifies that the maximum total sulfur content for oil is 0.05 weight percent (500 ppmw) or less, the total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet, and has potential sulfur emissions of less than 0.060 lb SO₂/mmBtu in accordance with §60.4365(a) and §60.4370.
 - B. Demonstrate, by using representative fuel sampling to demonstrate that the sulfur content of the fuel does not exceed 0.060 lb SO₂/mmBtu in accordance with §60.4365(b) and §60.4370.

d. NSPS Reporting Requirements - In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:

- i. The date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date.
- ii. The actual date of initial start-up of an affected facility, postmarked within 15 days after such date.
- iii. As required under §60.4375, §60.4380 and §60.4395, periods of excess emissions shall be reported on a semi-annual basis as follows:
 - A. Submit reports of excess emissions and monitor downtime in accordance with §60.7(c) by the 30th day following the end of each 6-month period. Excess emissions must be reported for all periods of unit operation, including startup, shutdown, and malfunction.
 - B. An excess emission for NO_x is any unit operating hour for which the 4-hour rolling average water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable water to fuel ratio needed to demonstrate compliance with the emission limit, as established during the performance test required in §60.8.
 - C. Any unit operating hour in which no water is injected into the turbine when a fuel is being burned that requires water injection for NO_x control will also be considered an excess emission.
 - D. A period of monitor downtime is any unit operating hour in which water is injected into the turbine, but the essential parametric data needed to determine the water to fuel ratio are unavailable or invalid.
 - E. Each report must include the average water to fuel ratio, average fuel consumption, and the combustion turbine load during each excess emission.

- a. To comply with this permit and to avoid applicability of 15A NCAC 2D .0530 "Prevention of Significant Deterioration," as requested by the Permittee, **nitrogen dioxide** emissions from the combustion turbines (ID Nos. ES1-A, ES1-B, ES2-A, ES2-B, ES3-A, ES3-B, ES4-A, ES4-B, ES5-A, ES5-B) shall be **less than 245 tons** per consecutive 12-month period.

To comply with this permit and to avoid applicability of 15A NCAC 2D .0530 "Prevention of Significant Deterioration," as requested by the Permittee, **carbon monoxide** emissions from the combustion turbines (ID Nos. ES1-A, ES1-B, ES2-A, ES2-B, ES3-A, ES3-B, ES4-A, ES4-B, ES5-A, ES5-B) shall be **less than 245 tons** per consecutive 12-month period.

- b. Performance Testing

In conjunction with the NSPS testing required under Permit Condition A.5., the carbon monoxide emissions of the oxidation catalyst shall be verified against the manufacturer's data. Testing for both natural gas and No. 2 fuel oil shall be conducted over the same load ranges as specified in Permit Condition A.4.b.

- c. Monitoring/Recordkeeping

- i. Each combustion turbine shall be monitored by instrumentation that shall measure and record on 15 minute intervals the turbine heat input, and ambient temperature. This data shall be applied to emission rates in pounds per hour developed from the manufacturer which are based on the parameters of fuel type, ambient temperature, and turbine heat input with curves developed to calculate actual daily nitrogen oxide emissions by turbine. Compliance test data that is approved by the DAQ may be used to validate and update this model for estimating nitrogen oxide emissions.

In addition, nitrogen oxide emissions from turbine startup and shutdown, shall be calculated using the manufacturer's data assuming a loading/unloading rate of 5 MW per minute. Each startup and shutdown shall be recorded daily for each turbine. Total daily nitrogen oxide emissions shall equal startups plus shutdowns plus daily running load.

- ii. Carbon monoxide emissions shall be controlled by an oxidation catalyst. The oxidation catalyst shall be monitored by periodic sampling (coupon sampling) as recommended by the manufacturer and by gas temperature at the gas generator exhaust. The gas temperature at the exhaust exit of the gas generator shall be monitored and maintained between **840 to 1800** degrees Fahrenheit except during start-up and shutdowns. Measured temperature at the gas generator shall be correlated to measured temperature at the catalyst outlet during testing performed under permit condition A.4.b. Any values falling outside the above operating parameters shall be recorded and dated, along with actions taken to bring them back within normal operating ranges.

- d. Reporting Requirement

The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

- i. The monthly nitrogen oxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
- ii. An exception report listing dates that monitoring parameters for the oxidation catalyst were outside normal ranges and the actions taken to correct.

6. 15A NCAC 2D .1418 "NEW ELECTRIC GENERATING UNITS"

- a. Pursuant to 15A NCAC 2D .1418, emissions of nitrogen oxides from any fossil fuel-fired combustion turbines permitted after October 31, 2000, serving a generator with a nameplate capacity greater than 25 megawatts electrical and selling any amount of electricity shall not exceed **0.15 pounds per million Btu** for gaseous and solid fuels and **0.18 pounds per million Btu** for liquid fuels if it is not covered under Rule 15A NCAC 2D .0530 (prevention of significant deterioration) or 15A NCAC 2D .0531 (nonattainment area major new source review).
- b. Monitoring - Under 40 CFR 75.12(e), gas-fired or oil-fired peaking units may use procedures specified in Appendix E of the part for estimating hourly NOx emission rates in lieu of CEMs. NCEMC's turbines are acid rain affected units which are subject to Subpart H and as such each turbine shall not emit more than 50 tons of the allowable 100 tons of nitrogen oxides during the ozone season [May 1 – September 30]. Compliance with this condition shall be demonstrated through Condition A. 5. of this Permit.

7. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REQUIREMENT - Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

EMISSION SOURCE(S)	TOXIC AIR POLLUTANT(S)
Ten oxidation catalysts	H ₂ SO ₄ (sulfuric acid)

- a. To ensure compliance with this Regulation, operation of the combustion turbines shall be limited while burning No. 2 fuel oil as follows:

Fuel Oil Sulfur Content	Maximum Turbine-Hours/Day (total 10 turbines)
0.050 % or less	120 (modeled as 12 hours/day per turbine of fuel oil-fired operation with the remaining 120 hour/day permitted for natural gas operation)
0.045 or less	140 (modeled as 14 hours/day per turbine of fuel oil-fired operation with the remainng 100 hours/day permitted for natural gas operation)
0.040 or less	160 (modeled as 16 hours/day per turbine of fuel oil-fired operation with the remaining 80 hours/day permitted for natural gas operation)
0.030 or less	230 (modeled as 23 hours/day per turbine of fuel oil-fired operation with the remaining 10 hours/day permitted for natural gas operation)
0.025 or less	Unlimited (no short-term restrictions on fuel oil usage)

Turbine startup and shutdown shall be limited to an average of 2 hours per day per turbine. On a turbine-by-turbine basis, startup and shutdown is defined as operation from 0 to 50 percent electrical output during natural gas firing and/or fuel oil firing.

- b. Monitoring - The Permittee shall on a daily basis measure and record the operational turbine hours while burning No. 2 fuel oil and the fuel oil sulfur content (percent) corresponding to these turbine hours. Also, the Permittee shall record the number of startup and shutdown hours for each turbine on a daily basis. Monitoring total sulfur content of fuel combusted in the turbines shall be conducted per 40 CFR 60 Subpart KKKK.
- c. Reporting - The Permittee shall submit an exception report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The exception report shall contain any deviations by date from the above listed operating limitations.

8. TESTING PROTOCOL – At least 45 days prior to performing any required emissions testing, the Permittee must submit a testing protocol to the Regional Supervisor, DAQ for review and approval. All testing protocols must be approved by the DAQ prior to performing such tests.
9. TESTING NOTIFICATION REQUIREMENT – To afford the Regional Supervisor, DAQ, the opportunity to have an observer present, the Permittee shall PROVIDE the Regional Office, in WRITING, at least 30 days notice of any required performance test(s).
10. NOTIFICATION REQUIREMENT - Within 15 days after start-up of the new combustion turbines (ID Nos. ES1-A, ES1-B, ES2-A, ES2-B, ES3-A, ES3-B, ES4-A, ES4-B, ES5-A, ES5-B), and the natural gas-fired heater (ID No. IES-13) Permittee shall NOTIFY, in WRITING, the Raleigh Regional Supervisor, DAQ, of the start-up.
11. REPORTING REQUIREMENT - The owner of the facility shall submit to the Regional Supervisor, DAQ, in such form and detail and at such time as may be required by the Environmental Management Commission or its administrative staff, ambient air quality monitoring data, actual traffic counts, and other such information deemed necessary.
12. REPORTING REQUIREMENT - Pursuant to 15A NCAC 2Q .0501(c)(2), the Permittee shall file a complete Title V application within 12 months after commencing operation to modify this construction and operation permit.
13. NOTIFICATION REQUIREMENT - As required by 15A NCAC 2D .0535, when emissions exceed Environmental Management Regulations for more than four (4) hours and result from a malfunction, a breakdown of process or control equipment or any abnormal conditions, the Regional Supervisor, Division of Air Quality, shall be notified as promptly as possible, but in no case later than twenty-four (24) hours or on the next working day of becoming aware of the occurrence. Such notice shall specify the facility name and location, the nature and cause of the excess emission, the time when first observed, the expected duration, and the estimated rate of emissions. This reporting requirement does not allow the operation of the facility in excess of Environmental Management Commission Regulations.
14. RECORDS RETENTION REQUIREMENT – Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. These records must be kept on site for a minimum of 2 years, unless another time period is otherwise specified.
15. ACID RAIN PERMIT REQUIREMENTS - In accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended and Title IV of the Clean Air Act, the Department of Environment and Natural Resources, Division of Air Quality issues this permit pursuant to Title 15A North Carolina Administrative Codes, Subchapter 2Q .0400 and other applicable Laws. The SO₂ Allowance Allocations and NO_x Requirements for each affected unit are shown in the table below.

Source		2007	2008	2009	2010	2011
ID No. ES1-A ID No. ES1-B ID No. ES2-A ID No. ES2-B ID No. ES3-A ID No. ES3-B ID No. ES4-A ID No. ES4-B ID No. ES5-A ID No. ES5-B	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR part 73.	NA*	NA*	NA*	NA*	NA*
	NO _x limit	NA**				

* SO₂ allowances are not allocated by U.S. EPA for new units under 40 CFR part 72.

** Does not apply for gas or oil-fired units.

The Acid Rain Permit Application, dated April 28, 2005, submitted for this facility, as approved by the Department of Environment and Natural Resources, Division of Air Quality, is part of this permit. The owners and operators of these acid rain sources must comply with the standard requirements and special provisions set forth in the attached application.

B. GENERAL CONDITIONS AND LIMITATIONS

- REPORTS, TEST DATA, MONITORING DATA, NOTIFICATIONS, AND REQUESTS FOR RENEWAL shall be submitted to the:
Regional Supervisor
North Carolina Division of Air Quality
Raleigh Regional Office

Physical, Courier Service & Certified Mail Address	Regular Mail Address
3800 Barrett Drive Raleigh, NC 27609	1628 Mail Service Center Raleigh, NC 27699-1628

- PERMIT RENEWAL REQUIREMENT - The Permittee, at least 90 days prior to the expiration date of this permit, shall request permit renewal by letter in accordance with 15A NCAC 2Q .0304 (d) and (f). Pursuant to 15A NCAC 2Q .0203 (i), no permit application fee is required for renewal of an existing air permit. The renewal request should be submitted to the Regional Supervisor, DAQ.
- ANNUAL FEE PAYMENT - Pursuant to 15A NCAC 2Q .0203 (a), the Permittee shall pay the annual permit fee within 30 days of being billed by the DAQ. Failure to pay the fee in a timely manner will cause the DAQ to initiate action to revoke the permit.
- ANNUAL EMISSION INVENTORY REQUIREMENTS - The Permittee shall report by June 30 of each year the actual emissions of each air pollutant listed in 15A NCAC 2Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by the responsible official of the facility.

5. EQUIPMENT RELOCATION - A new air permit shall be obtained by the Permittee prior to establishing, building, erecting, using, or operating the emission sources or air cleaning equipment at a site or location not specified in this permit.
6. REPORTING REQUIREMENT - Any of the following that would result in previously unpermitted, new, or increased emissions must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application regarding facility emissions;
 - b. changes that modify equipment or processes of existing permitted facilities; or
 - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

7. This permit is subject to revocation or modification by the DAQ upon a determination that information contained in the application or presented in the support thereof is incorrect, conditions under which this permit was granted have changed, or violations of conditions contained in this permit have occurred. The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air cleaning device(s) and appurtenances.
8. This permit is nontransferable by the Permittee. Future owners and operators must obtain a new air permit from the DAQ.
9. This issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the effective date of this permit.
10. This permit does not relieve the Permittee of the responsibility of complying with all applicable requirements of any Federal, State, or Local water quality or land quality control authority.
11. Reports on the operation and maintenance of the facility shall be submitted by the Permittee to the Regional Supervisor, DAQ at such intervals and in such form and detail as may be required by the DAQ. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.
12. A violation of any term or condition of this permit shall subject the Permittee to enforcement pursuant to G.S. 143-215.114A, 143-215.114B, and 143-215.114C, including assessment of civil and/or criminal penalties.
13. Pursuant to North Carolina General Statute 143-215.3 (a) (2), no person shall refuse entry or access to any authorized representative of the DAQ who requests entry or access for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
14. The Permittee must comply with any applicable Federal, State, or Local requirements governing the handling, disposal, or incineration of hazardous, solid, or medical wastes, including the Resource Conservation and Recovery Act (RCRA) administered by the Division of Waste Management.

15. PERMIT RETENTION REQUIREMENT - The Permittee shall retain a current copy of the air permit at the site. The Permittee must make available to personnel of the DAQ, upon request, the current copy of the air permit for the site.

16. CLEAN AIR ACT SECTION 112(r) REQUIREMENTS - Pursuant to 40 CFR Part 68 "Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Section 112(r)," if the Permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the Federal Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

17. PREVENTION OF ACCIDENTAL RELEASES - GENERAL DUTY - Pursuant to Title I Part A Section 112(r)(1) of the Clean Air Act "Hazardous Air Pollutants - Prevention of Accidental Releases - Purpose and General Duty," although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release. **This condition is federally-enforceable only.**

Permit issued this the 21st day of September, 2007.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Donald R. van der Vaart, Ph.D., P.E., Chief, Air Permits Section
Division of Air Quality

By Authority of the Environmental Management Commission

Air Permit No. 09488R03