NORTH CAROLINA DIVISION OF AIR QUALITY

Air Permit Review

Permit Issue Date:

Region: Mooresville Regional Office
County: Gaston
NC Facility ID: 3600040
Inspector's Name: Tony McManus
Date of Last Inspection: 08/26/2008
Compliance Code: C/In Compliance With Procedural Reqr

Facility Data

Applicant (Facility's Name): Duke Energy Carolinas, LLC - Riverbend Steam Station

Facility Address:
Duke Energy Carolinas, LLC - Riverbend Steam Station
175 Steam Plant Road
Mt Holly, NC 28020

SIC: 4911 / Electric Services
NAICS: 221112 / Fossil Fuel Electric Power Generation

Facility Classification: Before: Title V **After:** Title V
Fee Classification: Before: Title V **After:** Title V

Permit Applicability (this application only)

SIP: 2Q .0400
NSPS:
NESHAP:
PSD:
PSD Avoidance:
NC Toxics:
112(r):
Other: 40 CFR Parts 72, 73 and 76

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Steve Jones Environmental Coordinator (704) 263-3200 175 Steam Plant Road Mt. Holly NC, 28120	Thomas Rawe Station Manager (828) 478-7679 P.O. Box 1006, EC11E Charlotte NC, 28201+1006	William Horton Senior Environmental Specialist (980) 373-3226 526 South Church Street Charlotte NC, 28202

Application Data

Application Number: 3600040.07A
Date Received: 12/27/2006
Application Type: Modification
Application Schedule: TV-Significant

Existing Permit Data
Existing Permit Number: 03788/T31
Existing Permit Issue Date: 05/30/2007
Existing Permit Expiration Date: 10/31/2008

Review Engineer: Ed Martin

Review Engineer's Signature: **Date:**

Comments / Recommendations:
Issue 03788/T32
Permit Issue Date:
Permit Expiration Date:

I. Purpose of Application:

Duke Energy has submitted an application (3600040.07A) to comply with the annual NOx emission requirements of the Acid Rain program by averaging the NOx emission rates and heat inputs for the 52 units listed in their application Averaging Plan. Previously Duke complied with the Acid Rain regulations on an individual unit-by-unit basis rather than averaging among units. Duke's initial Averaging Plan application was received December 27, 2006. Duke then submitted a corrected Averaging Plan form, received January 31, 2007, because the two numbers in Step 2 of the form were reversed. An application fee is not required for a renewal (only) of the Acid Rain portion of the permit; however, it is required anytime a change to an averaging plan is made. In addition, Duke submitted an application, (8500004.07C) received June 21, 2007, for renewal of the Title IV Acid Rain portion of their Title V permit.

Therefore, this permit revision will include both the averaging plan requirements and the renewal of the Acid Rain portion of the Title V permit (with application 8500004.07C consolidated with application 8500004.07A), extending the effective dates of the Acid Rain portion of the permit for the calendar years 2007-2011. Duke Energy submitted an Acid Rain Permit Application dated June 18, 2007, a Phase II NO_X Compliance Plan dated December 18, 2006, and a Phase II NO_X Averaging Plan dated January 4, 2007, which will become part of the Title V permit (as attachments).

Other miscellaneous changes were made to the general conditions (see Section II below):

This change is a significant permit modification being made in accordance with 15A NCAC 2Q .0501(d)(1).

II. Permit Changes:

The following changes were made to the Duke Energy Carolinas LLC Riverbend Steam Station Air Permit No. 03788T31:

Page	Part, Section	Change
Cover	--	Amended to reflect current permit number, issue and effective date, and associated application information.
TOC	--	Revised for new Acid Rain application attachments.
22-27	Part I, Section 2.3	Revised Acid Rain effective dates.
		Revised NOx limits in accordance with averaging plan in Section 2.3 B.
		Revised for new Acid Rain application attachments in Section 2.3 D.
28-35	Part I, Section 3	Revised general condition H.
		Revised general condition JJ.
		Added general condition LL.
		Added general condition MM.

III. Facility Description

Duke Power=s Riverbend Steam Station is an electric utility that generates electrical power using boilers and combustion turbines. The Riverbend facility has two coal/No. 2 fuel oil/low-level PCB-contaminated mineral oil-fired electric utility boilers (ES-1 and ES-2), two coal/No. 2 fuel oil-fired boilers (ES-3 and ES-4), four No. 2 fuel oil/natural gas-fired simple-cycle internal combustion turbines (ES-5, ES-6, ES-7 and ES-8), one No. 2 fuel oil-fired auxiliary boiler (ES-9), two NSPS coal crushers (CRA and CRB), two NSPS coal conveyors (CB1 and CB2), and one No. 2 fuel oil-fired emergency/blackout protection diesel generator.

IV. Summary of Changes to Emission Sources and Control Devices:

There are no changes to emission sources or control devices.

V. Emission and Regulatory Evaluation

15A NCAC 2Q .0400 "Acid Rain Procedures" (**40 CFR Part 72** "Permits Regulation")
North Carolina air quality regulation 15A NCAC 2Q .0400 implements Phase II of the federal acid rain program pursuant to Title IV of the CAA as provided in 40 CFR Part 72. Issuance or denial of acid rain

permits shall follow the procedures under 40 CFR Part 70 (Title V) and Part 72. If the provisions or requirements of Part 72 conflict with or are not included in Part 70, the Part 72 provisions and requirements shall apply and take precedence.

15A NCAC 2Q .0400 "Acid Rain Procedures" (**40 CFR Part 73** "Sulfur Dioxide Allowance System")
Establishes the procedures for allocation, tracking, holding and transfer of sulfur dioxide emission allowances, including the initial allowances allocated to each applicable Phase II unit account to be held in calendar years 2000 through 2009 (per Table 2, column C) and in calendar years 2010 and each year thereafter (Table 2, column F).

15A NCAC 2Q .0400 "Acid Rain Procedures" (**40 CFR Part 76** "Acid Rain Nitrogen Oxides Emission Reduction Program")
Each coal-fired utility unit that is subject to an Acid Rain emissions limit for SO_2 under Phase I or Phase II of the CAA must meet the NO_X emission limitations under 40 CFR Part 76. Duke Energy has exercised the option (beginning with this application) to use NO_X emissions averaging to comply with the NO_X emissions limits. NO_X emissons averaging is a NO_X compliance option under 40 CFR 76.11 which allows any affected units subject to a NO_X emissions limit under 40 CFR 76.5, 76.6 or 76.7, under the control of the same owner and operator, and with the same designated representative, to average their NO_X emissions under an approved averaging plan. It has been verified that the averaging plan proposed meets the criteria that the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan is less than or equal to the Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7, as shown in the application.

VI. Public Notice

Pursuant to 15A NCAC 2Q .0521, a notice of the draft Title V Operating Permit will be published in a newspaper of general circulation in the area where the facility is located, to provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the draft (proposed) permit, review and public notice will be sent to EPA for their 45-day review, to persons on the Title V mailing list, and to the facility for review.

VII. Other Requirements

PE Seal
NA

Zoning
NA

Fee Classification
The facility fee classification before and after this modification will remain as "Title V".

Increment Tracking
NA

VIII. Recommendations

later after public notice