

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date:

Region: Raleigh Regional Office
County: Halifax
NC Facility ID: 4200170
Inspector's Name: Will Wike
Date of Last Inspection: 06/09/2009
Compliance Code: 3 / Compliance - inspection

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Rosemary Power Station Facility Address: Rosemary Power Station 120 West 12th Street Roanoke Rapids, NC 27870 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			SIP: 2Q .0400 (Acid Rain), 2D .2400 (CAIR) NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other: 40 CFR Parts 72 and 75
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 4200170.09B Date Received: 03/31/2009 Application Type: Modification Application Schedule: TV-Significant Existing Permit Data Existing Permit Number: 06586/T14 Existing Permit Issue Date: 03/27/2009 Existing Permit Expiration Date: 07/31/2011
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Review Engineer: Ed Martin Review Engineer's Signature: _____ Date: _____ DRAFT FOR PUBLIC NOTICE		Comments / Recommendations: Issue 06586/T15 Permit Issue Date: Permit Expiration Date:	

I. Purpose of Application

Application 4200170.09B

Rosemary Power is requesting renewal of the Title IV Acid Rain portion of their Title V permit (Section 2.3). The current acid rain portion of the permit expires on December 31, 2009. The Acid Rain requirements are being renewed for another five years with effective dates from January 1, 2010 through December 31, 2014. The Acid Rain application will become part of the Title V permit (as an attachment). The expiration date for the Title V permit itself will not change. This permit is being processed as a significant modification under 15A NCAC 2Q .0501(d)(1) in accordance with 40 CFR Part 72.

Application 4200170.09A (consolidated with Application 4200170.09B)

Also, this permit revision includes adding the Clean Air Interstate Rules (CAIR) to the permit (Section 2.4). These rules are state-only until such time as they are approved by EPA into the SIP. At that time, the rules will become both state and federally enforceable (see Section V below).

II. Permit Changes

The following changes were made to the Title V permit:

Page	Condition No.	Change
Cover	Permit Information	Modified to reflect current permit number, issue and effective date, and associated application information.
TOC	--	Added Section 2.4 - Clean Air Interstate Rules (CAIR) Permit Requirements.
		Revised date for new Acid Rain Permit Application attachment.
		Added Clean Air Interstate Rules (CAIR) Application as an attachment.
4	Section 2.1 A regulation table	Added 15A NCAC 2D .2404 Clean Air Interstate Rule (CAIR) permit requirements as an applicable regulation for sulfur dioxide and 15A NCAC 2D .2403 and .2405 CAIR permit requirements as applicable regulations for nitrogen oxides.
		Changed applicable regulation from 15A NCAC 2D .1417 to 40 CFR 52 Subpart II (Federal-only requirement) for nitrogen oxides.
5	Section 2.1.A.2	Changed this condition from 15A NCAC 2D .1417 to 40 CFR 52 Subpart II (Federal-only requirement).
	Section 2.1.A.2.d	Revised to add nitrogen oxides interim season reporting no later than July 30 of each year for tons of nitrogen oxides emitted during the previous May and June, since this requirement remains part of the approved SIP version of the 2D .1404(g) rule.
6	Section 2.1 B regulation table	Added 15A NCAC 2D .2404 CAIR permit requirements as an applicable regulation for sulfur dioxide and 15A NCAC 2D .2403 and .2405 CAIR permit requirements as applicable regulations for nitrogen oxides.
		Changed applicable regulation from 15A NCAC 2D .1417 to 40 CFR 52 Subpart II (Federal-only requirement) for nitrogen oxides.
7	Section 2.1.B.2	Changed this condition from 15A NCAC 2D .1417 to 40 CFR 52 Subpart II (Federal-only requirement).
	Section 2.1.B.2.d	Revised to add nitrogen oxides interim season reporting no later than July 30 of each year for tons of nitrogen oxides emitted during the previous May and June, since this requirement remains part of the approved SIP version of the 2D .1404(g) rule.
16	Section 2.3	Revised Acid Rain effective dates.
17-18	Section 2.4	Added CAIR permit requirements.

III. Facility Description

Rosemary Power Station is a PSD-affected facility, providing power to a grid that serves North Carolina through Dominion Power. The facility consists of one natural gas/No. 2 oil-fired combined cycle General Electric (GE) Frame 7 combustion turbine (ID No. ES1-CT1), one natural gas/No. 2 oil-fired combined cycle GE Frame 6 combustion turbine (ID No. ES2-CT2), two auxiliary steam boilers (ID Nos. ES3-B1 and ES4-B2), one No. 2 fuel oil storage tank (ID No. ES6-STR1), an emergency diesel generator (ID No. ES-5), a recirculation cooling water system, and ancillary support equipment. Each combined-cycle combustion turbine includes an unfired heat recovery steam generator (HRSG). Steam produced by the HRSGs is routed to a common steam turbine (ST) for the additional generation of electricity. The auxiliary boilers are used to produce steam only for plant needs, mainly in the winter.

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

Acid Rain

The combustion turbines ES1-CT1 and ES2-CT2 are subject to the Title IV Acid Rain program. The applicable acid rain rules, as specified in the Acid Rain Permit Application attached to the permit, includes the following emission and monitoring requirements:

15A NCAC 2Q .0402 "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. SO₂ allowances are not allocated by U.S. EPA for new units under 40 CFR Part 72; however, the sources must hold enough SO₂ allowances to cover their annual SO₂ emissions. There are no NO_x emission limits for gas or oil-fired units; however, NO_x emissions monitoring is required.

15A NCAC 2Q .0402 "Acid Rain Procedures" (40 CFR Part 75 "Continuous Emissions Monitoring")

This regulation establishes requirements for the installation, certification, operation, and maintenance of continuous emissions or opacity monitoring systems.

CAIR

This rule is state-only until such time as EPA approves it into NC's State Implementation Plan (SIP). EPA proposed approval of the CAIR rules into the SIP on August 7, 2009, and the public comment period ended September 8, 2009. When the CAIR rules become part of the SIP, the rules will become both state and federally enforceable and the federal-only 40 CFR 52 Subpart II condition can be removed from the permit since it will be superseded by CAIR (see 2D .1417 NO_x SIP Call Rule below). If the CAIR rules are approved into the SIP before issuance of this permit, the permit will be revised to make the CAIR rules both state and federally enforceable, and the federal-only 40 CFR 52 Subpart II condition will be removed.

The applicable CAIR rules, as specified in the CAIR Permit Application attached to the permit, includes the emission and monitoring requirements shown below for the following affected CAIR sources:

PERMITTED SOURCE	CAIR ID No.
ES1-CT1	1
ES2-CT2	2

15A NCAC 2D .2400 . "Clean Air Interstate Rule" (STATE-ONLY REQUIREMENT)

This rule implements the federal Clean Air Interstate Rule under 40 CFR Part 96. The following 2D .2400 sections apply:

15A NCAC 2D .2403" Nitrogen Oxide Emissions"

This section specifies the total annual NO_x allocations and includes the compliance, emissions measurements recording and reporting, excess emissions and liability requirements.

15A NCAC 2D .2405 "Nitrogen Oxide Emissions During Ozone Season"

This section specifies the NO_x allocations during the ozone season and includes the compliance, emissions measurements recording and reporting, excess emissions and liability requirements.

15A NCAC 2D .2404 “Sulfur Dioxide Emissions”

This section specifies the annual SO₂ allocations and includes the compliance, emissions measurements recording and reporting, excess emissions and liability requirements.

2D .1417 NO_x SIP Call Rule

The version of the 2D .1417 NO_x SIP Call rule previously in the permit for the turbines is being changed in Sections 2.1.A.2 and 2.1.B.2 to 40 CFR 52 Subpart II “Emissions Allocations for Utility Companies” and made federal-only. The previous version was both federal and state enforceable. It has been superseded by CAIR as far as being state enforceable (state-only); therefore, the state enforceable portion of the rule that was previously in the permit can be removed since the state-only CAIR rules are now being put in the permit. However, there remains a federal version of 2D .1417 in the approved SIP under 40 CFR 52 Subpart II, so that federal version must remain in the permit until the CAIR rules are approved by EPA into the SIP. Therefore, the 2D .1417 condition is changed to 40 CFR 52 Subpart II (where the SIP resides) and made federal-only. When the CAIR rules become part of the SIP, the federal-only 40 CFR 52 Subpart II condition can be removed from the permit since the CAIR rules will apply as both federal and state enforceable. The language for the federal-only version remaining in the permit under 40 CFR 52 Subpart II is the same as for the state version previously in the permit except for the addition of ozone season interim reporting in Sections 2.1.A.2.d and 2.1.B.2.d to report nitrogen oxides no later than July 30 of each year for tons of nitrogen oxides emitted during the previous May and June, since this interim reporting requirement remains part of the approved SIP version of the 2D .1404(g) rule.

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. Recommendations

later after public notice