

October 16, 2006

Tracy Patterson
Authorized Account Representative
Cogentrix Energy, Inc.
9405 Arrowpoint Boulevard
Charlotte, NC 28273

Re: Use of Single-load Flow RATAs to Quality-Assure Ozone Season Data at Four
Cogentrix Energy, Inc. Facilities (Facility IDs (ORISPLs) 54081, 10377, 10071, and
50464)

Dear Mr. Patterson:

The purpose of this letter is to notify you that EPA is treating recent telephone conversations between yourself and EPA staff during the week of August 14, 2006 as a petition to use single-load relative accuracy test audits (RATAs) of the flow monitors installed at four Cogentrix Energy, Inc. (Cogentrix) facilities to validate the data recorded by these monitors during the 2004, 2005 and 2006 ozone-seasons, instead of using missing data substitution. EPA approves the petition, with conditions, as discussed below.

Background

Cogentrix owns and/or operates twenty coal-fired boilers at four facilities, located in Virginia and North Carolina. The Virginia facilities include Spruance Genco, LLC, Cogentrix of Hopewell, and Cogentrix of Portsmouth. The North Carolina facility is Edgecombe Genco, LLC. According to Cogentrix, all twenty of the units at these facilities are subject to the NO_x Budget Trading Program. Therefore, Cogentrix is required to monitor and report NO_x mass emissions and heat input for these units, in accordance with Subpart H of 40 CFR Part 75.

The monitoring plans for the units indicate that all twenty units are in common stack configurations. Two units share each stack; therefore, the total number of common stacks at the facilities is ten. Four of the common stacks are located at the Spruance Genco, LLC facility, and two stacks are located at each at the other facilities. To meet the emission monitoring requirements of Part 75, Cogentrix has installed and certified continuous emission monitoring systems (CEMS) at each of the common stacks to measure the NO_x concentration, the CO₂ concentration, and the stack gas volumetric flow rate. The NO_x mass emissions are calculated as the product of the NO_x concentration and flow rate, using Equation F-26 in Appendix F of Part 75.

The monitoring plans further indicate that Cogentrix has elected to report NO_x mass emissions for these units only during the ozone season, i.e., from May 1 through September 30. According to §75.74(c), when the ozone season-only reporting option is selected, certain

quality-assurance (QA) tests of the monitoring systems are required prior to the ozone season, and certain other QA tests are required inside the ozone season.

It has come to EPA's attention that the flow monitoring systems installed on the units in question have not met all of the quality-assurance test requirements for the 2004, 2005 and 2006 ozone seasons. In particular, the requirement of §75.74(c)(2)(ii)(C) to perform a 2-load RATA of each flow monitoring system prior to the ozone season has not been consistently met. In a number of instances, the pre-season flow RATAs were done at only one load level. For Spruance Genco, LLC, single-load flow RATAs were performed at three of the four stacks in 2005 and at all four stacks in 2006. For the Hopewell facility, single-load flow RATAs were done at both stacks in 2005 and 2006. For the Portsmouth facility, a single load flow RATA was performed at only one stack, in 2006. For the Edgcombe Genco, LLC facility, single-load RATAs were done at both stacks in 2004, 2005, and 2006.

Cogentrix has indicated to EPA that it misunderstood the flow monitor QA requirement in §75.74(c)(2)(ii)(C) for ozone season-only reporters. The source of the misunderstanding centers around a provision in section 2.3.1.3(c)(3) of Appendix B to Part 75. That section allows single-load flow RATAs to be performed in lieu of the 2-load tests if the unit has operated within one load range (i.e., low, mid, or high) for at least 85 percent of the time since the previous annual flow RATA.

In all of the aforementioned instances in which Cogentrix performed single-load flow RATAs instead of 2-load tests, the 85 percent criterion was met, and in every case Cogentrix submitted the results of the load analyses, in the quarterly reports required under §75.64, to document that the units qualified for the reduced testing requirement. However, Cogentrix was apparently unaware that the single-load flow RATA option is not available to sources that report data on an ozone season-only basis.

The QA provisions in Appendix B of Part 75 were written for Acid Rain Program sources, all of which are required to report emissions data year-round. The concept of ozone season-only reporting was first introduced into Part 75 in 1998, the year in which the EPA Administrator issued the NO_x SIP Call, requiring states in the Eastern U.S. to reduce their sources' NO_x emissions during the ozone season (i.e., from May through September). In response to the NO_x SIP Call, EPA added a new Subpart H to Part 75 (i.e., §§75.70-75.75), containing monitoring, recordkeeping and reporting provisions for NO_x mass emissions. Subpart H has since been adopted for use under the NO_x Budget Program.

Section 75.74 specifies the annual and ozone season monitoring and reporting requirements for sources in the NO_x Budget Trading Program. Paragraph (b) of §75.74 allows sources (such as the Cogentrix facilities) that are not in the Acid Rain Program and for which year-round NO_x mass reporting is not otherwise required to report NO_x mass emissions data on an ozone season-only basis. When a qualifying source elects to use the ozone season-only reporting option and uses CEMS to meet the Part 75 monitoring requirements, the CEMS data must be quality-assured according to §§75.74(c)(1) through (c)(3).

Section 75.74(c)(1) states that “[e]xcept where otherwise noted, the provisions of paragraphs (c)(2) and (c)(3) of this section apply instead of the quality assurance provisions in sections 2.1 through 2.3 of appendix B to this part, and shall be used in lieu of those appendix B provisions.” In other words, ozone season-only reporters are not to follow the QA provisions of Appendix B unless otherwise specified in §§75.74(c)(2) or (c)(3). Cogentrix’s apparent misunderstanding of this provision resulted in a misinterpretation of the QA requirements for ozone season-only reporters.

For flow monitors, the RATA load-level requirements in §75.74(c)(2)(ii)(C) for ozone season-only reporters are basically the same as the load level requirements in section 2.3 of Appendix B for year-round reporters, with one notable exception. Section 2.3.1.3(c)(3) of Appendix B allows the use of load data from the past year to justify performing this year’s annual flow RATA at a single load instead of two loads. However, this single-load flow RATA provision is not found in §75.74(c)(2)(ii)(C). Therefore, consistent with §75.74(c)(1), the single-load RATA option is not available to ozone season-only reporters.

EPA’s Determination

EPA conditionally approves Cogentrix’s request to use single-load flow RATAs to quality-assure the flow rate data for: (a) the 2005 and 2006 ozone seasons at the Spruance Genco, LLC and Hopewell facilities; (b) the 2006 ozone season at the Portsmouth facility; and (c) the 2004, 2005, and 2006 ozone seasons at the Edgecombe Genco, LLC facility.

EPA is granting this as a one-time exception to the QA requirements of §75.74(c)(2)(ii)(C), for the following reasons. First, as shown in Table 1, below, all of the single-load flow RATAs reported by Cogentrix in 2004, 2005, and 2006 met the 85 percent criterion in section 2.3.1.3(c)(3) of Appendix B for year-round reporters. Second, in 2003, for the initial certification of all of the flow monitors in question, Cogentrix performed 3-load RATAs. Third, all of the flow monitors have been quality-assured by means of daily calibration error tests, daily interference checks, and quarterly flow-to-load ratio tests during each ozone season since 2003. Taken together, these considerations provide reasonable assurance of the quality of the data generated by the flow monitors in the 2004, 2005, and 2006 ozone seasons. Finally, EPA notes that the Agency’s Monitoring Data Checking (MDC) software, which is used to provide sources with feedback on the quality-assurance (QA) status of the emissions data each quarter, did not flag any of Cogentrix’s single-load RATAs as invalid. Rather, the feedback reports consistently indicated that the QA status of the flow rate data was acceptable. EPA is taking steps to correct this flaw in the MDC programming.

Table 1. Flow RATA History at Four Cogentrix Facilities

Facility	Stack ID	2004 Flow RATA		2005 Flow RATA		2006 Flow RATA	
		No. of Loads Tested	% of Data in One Load Band ¹	No. of Loads Tested	% of Data in One Load Band ¹	No. of Loads Tested	% of Data in One Load Band ¹
Spruance Genco, LLC	CS001	2	NA	1	89.0	1	92.0
	CS002	2	NA	1	90.0	1	92.0
	CS003	2	NA	1	87.0	1	88.0
	CS004	2	NA	2	NA	1	90.0
Hopewell	CS001	2	NA	1	91.0	1	93.5
	CS002	2	NA	1	92.0	1	90.9
Portsmouth	CS001	2	NA	2	NA	2	NA
	CS002	2	NA	2	NA	1	85.0
Edgecombe Genco, LLC	CS001	1	92.2	1	94.0	1	93.6
	CS002	1	96.2	1	95.0	1	96.0

¹ In order to qualify for a single-load flow RATA, at least 85.0 percent of the operating loads since the previous annual flow RATA must be within a single load band (low, mid, or high). Use of this single-load RATA provision is normally restricted to year-round reporters.

Therefore, for the purposes of quality-assuring the 2004, 2005, and 2006 ozone season NO_x mass emissions and heat input data for Spruance Genco, LLC, Cogentrix of Portsmouth, Cogentrix of Hopewell, and Edgecombe Genco, LLC, EPA conditionally approves the use of the single-load flow RATAs performed at these facilities in 2004, 2005, and 2006. As a condition of this approval, starting in 2007, Cogentrix shall perform 2-load and 3-load flow RATAs at each of these facilities, as required by §75.74(c)(2)(ii)(C). Single-load flow RATAs will no longer be accepted for any of these facilities unless Cogentrix switches from ozone season-only reporting to year-round reporting.

Please be advised that this is a one-time waiver of the QA requirements of §75.74(c)(2)(ii)(C) and applies only to the 2004, 2005, and 2006 ozone seasons. In 2007 and beyond, as long as Cogentrix continues to report on an ozone season-only basis, EPA expects the QA test requirements for that reporting option to be fully met for the Portsmouth, Hopewell, Spruance Genco, LLC, and Edgecombe Genco, LLC facilities. Otherwise, missing data substitution will be required, without exception. If you have any questions about this determination, please contact Robert Vollaro at (202) 343-9116. Thank you for your continued cooperation.

Sincerely,

/s/
Sam Napolitano, Director
Clean Air Markets Division

cc: Jerome Curtin, EPA Region III
Jerome Brooks, Virginia DEQ
Richard Simpson, North Carolina DENR
Robert Vollaro, CAMD