



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 20 2003

OFFICE OF
AIR AND RADIATION

Mr. David J. Irish
Designated Representative
Rochester Gas and Electric Corporation
89 East Avenue
Rochester, NY 14649-0001

Re: Petition for Alternative Recertification Deadlines following SNCR Installation at
RG&E's Russell Units 1 through 4

Dear Mr. Irish:

The United States Environmental Protection Agency (EPA) has reviewed the petition, submitted by Rochester Gas and Electric Corporation (RG&E) on April 1, 2003, under §75.66(a) for Units 1, 2, 3 and 4 associated with Common Stacks 1 and 2 of the Russell Station (Russell), Facility ID (ORISPL) 002642. The petition requests that EPA allow for RG&E to delay the start of the recertification time frame required by §75.4(e) for each common stack monitoring location until after the installation of selective non-catalytic reduction (SNCR) nitrogen oxides (NO_x) emission controls has been completed on each unit associated with a given common stack.¹ The petition also requests that only data for hours where urea is injected during the SNCR system tests following the initial SNCR installation be invalidated and that all other data collected during uncontrolled operation of the units be considered valid in accordance with the previous certification of the monitoring systems. EPA approves the petition with conditions, as described below.

Background

RG&E is in the process of installing SNCR for each of the four coal-fired boilers at Russell. Units 1 and 2 exhaust to Common Stack 1 (CS1), and Units 3 and 4 exhaust to Common Stack 2 (CS2). Each pair of units is monitored using continuous emission monitoring systems (CEMS) at the common stack for the associated units.

¹ RG&E also notes that §75.20(b) requires recertification whenever the owner or operator make a change to the flue gas handling system or unit operation that may significantly change the flow or concentration profile.

The addition of SNCR as add-on NOx emission controls triggers the CEMS recertification requirements of §75.4(e). As such, substitute emissions data must be used for each unit operating hour after emissions first pass through the new add-on NOx emission controls until all required certification tests are successfully completed. Unless the conditional data validation procedures of §75.20(b)(3) are followed, data from the CEMS may not be used until completion of all required certification tests. Also, the recertification tests must be completed no later than 90 unit operating days or 180 calendar days after emissions first pass through the new add-on NOx emission controls.

The installation of SNCR at each Russell unit requires a boiler outage. RG&E therefore is performing the installations one boiler at a time. The installation, start-up and testing process for the units began in February 2003 and is scheduled to be completed by the end of June 2003. However, continuous operation of any of the SNCRs will not begin until May 1, 2003 (start of the 2003 ozone season).

Start-up testing for the Unit 2 SNCR was conducted during approximately 30 hours of unit operation between March 7 and March 14, 2003. SNCR start-up testing for Unit 1 is not expected to start until May 19, 2003. Under §75.4(e), recertification of the CEMS at Common Stack 1 would be necessary, and the time frame (90 unit operating days or 180 calendar days) for completing recertification would begin, starting with the first use of the SNCR on March 7, 2003. The CEMS data would not be valid until certification testing or conditional data validation was completed. Once the Unit 1 SNCR starts up, recertification of the CEMS at Common Stack 1 would then again be required, and the data would not be valid for a period of time. This situation would be repeated for the Units 3 and 4 CEMS associated with Common Stack 2, where the SNCRs are expected to start up on April 2 and 21, 2003 respectively.

Under these circumstances, RG&E seeks an extension of the recertification deadlines. Due to the staggered schedule for SNCR installation, start-up, and testing at the four units, RG&E might have to perform recertification twice at each common stack in order to meet the current recertification deadlines, rather than waiting to perform a single recertification for each common stack. However, until May 2003, the SNCRs will only be operated in short test runs, which may be insufficient operation for completion of certification testing. Further, waiting to perform a single recertification after installation of both SNCRs for units at a common stack would result in invalidating a significant amount of CEMS data. RG&E requests that the start of the certification deadline period (90 unit operating days or 180 calendar days, whichever occurs first) be delayed until after both SNCRs have been installed for a given common stack.

RG&E also notes that the SNCR installation will not add any substantial equipment into the boiler exhaust path. Urea injection nozzles are being added before the superheaters and airheaters. No other physical changes to the boiler, exhaust ducts or exhaust stacks will be made as a result of the SNCR installation. Therefore, there should be no change to the flow or concentration profile during operating hours when the SNCR system is not operated. Because there should be no effect on the flow or concentration profile when the SNCR is not operated,

RG&E requests that, during the interim period between SNCR installations at the units at a given common stack, CEMS data collected during operating hours with no urea injection be reportable as quality assured based upon the previous CEMS certification. During the limited SNCR test periods prior to May 1, 2003, RG&E states that it will use substitute data.

EPA's Determination

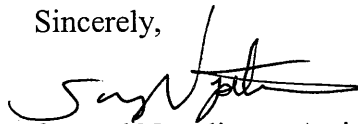
EPA approves RG&E's request to delay CEMS recertification under §75.4(e) until the SNCRs for both units associated with a given common stack have been installed. Therefore, the deadline for completing recertification for each unit at a common stack shall be the earlier of 90 unit operating days, or 180 calendar days, after the date that emissions first exit the unit after the SNCRs have been installed at both units at the common stack.

EPA also approves RG&E's request that CEMS data for any operating hour following the first SNCR installation, and prior to the final SNCR installation, at the units at a common stack be considered valid for reporting unless urea is injected, i.e., the SNCR is operated. For operating hours during this interim period when urea is injected, substitute data in accordance with §75.20(b)(3)(i) shall be reported.

In particular, for Common Stack 1, RG&E intends to operate the SNCR for Unit 2 starting May 1, 2003. In lieu of using substitute data from May 1, 2003 until the SNCR for Unit 1 is installed (approximately May 19, 2003), RG&E may elect to use the conditional data validation procedure as described in §75.20(b)(3)(ii) through (ix). This option will allow for up to 720 stack operating hours of data to be collected by the common stack CEMS as conditionally valid, provided a relative accuracy test audit (RATA) is successfully passed following the Unit 1 SNCR installation. The 720 stack operating hour period for conditional data validation may begin following a probationary calibration error test on or after May 1, 2003.

EPA's determination in this letter relies on the accuracy and completeness of RG&E's April 1, 2003 submission and is appealable under Part 78. If you have any questions regarding this correspondence, please contact Matthew Boze at (202) 564-1975.

Sincerely,



Samuel Napolitano, Acting Director
Clean Air Markets Division

cc: Ann Zownir, USEPA Region 2
Don Spencer, NYDEC
Joe Simpson, RG&E