

DOCUMENT #1 (1 PAGE)

March 15, 2005

Russ Bennett, Safety and Environmental Coordinator
Redding Electric Utility
P.O. Box 496071
Redding, CA 96049-6071

Unit 5 Oxides of Nitrogen Demonstration Limit

Dear Mr. Bennett:

Condition C.7 of Redding Power Plant Title V permit #03-TV-02 requires that Redding Power shall install, operate, and maintain the Unit #5 SCONOX system in a manner designed to achieve a Demonstration NOx Limit of 2.0 ppmvd, 1 hour rolling average @ 15% O₂ and in conformance with the SCONOX vendor's procedures. The condition also requires Redding Power to conduct the demonstration program for a three-year period. The three-year period concludes on June 1, 2005.

In order for the District to evaluate the feasibility of the demonstration limit, please submit the following Unit #5 information for the period of June 2, 2002, to June 1, 2005:

- a. Periods of NOx emissions 1-hour rolling average over 2.5 ppm
- b. Periods of NOx emissions 1-hour rolling average over 2.0 ppm
- c. Recap of all maintenance and repair performed on the SCONOX system
- d. Any upsets or malfunctions to the SCONOX system that were not required to be called in to the District under Rule 3:10
- e. Any other information relative to the SCONOX system installation, operation and maintenance during this period including the turbine operating rate

Please submit this information to the District by July 1, 2005. If you have questions regarding this matter, please contact me at 225-5674.

Sincerely,

Ross Bell
Air Quality District Manager

RB/eg



Shasta County

DEPARTMENT OF RESOURCE MANAGEMENT
1855 Placer Street, Redding, CA 96001

Russ Mull, R.E.H.S., A.I.C.P.
Director

Richard D. Barnum
Assistant Director

June 23, 2005

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Russ Bennett
Safety and Environmental Coordinator
Redding Electric Utility
P.O. Box 496071
Redding, CA 96049-6071

Dear Mr. Bennett:

UNIT 5 DEMONSTRATION LIMIT, PTO# 00-PO-39 CONDITION # 26

The Shasta County Air Quality Management District (District) is in receipt of your letter dated June 13, 2005, with the data attached regarding the Unit 5 Oxides of Nitrogen (NOx) Demonstration Limit. This information gathering was a result of District oversight of your demonstration program regarding an NOx limit of 2.0 ppmvd at 15% oxygen as contained in note 1 of Condition 26 of the District-issued permit.

With review of the above information and routine reports submitted to the District, the following findings are made:

1. 11,527 tons of NOx were emitted by Redding Power's Unit 5 during the first three years of operation.
2. The average arithmetic NOx concentration during the first three years of operation was 1.24 ppmvd at 15% oxygen. The average NOx concentration during the month of June 2004, was 2.00 and during the month of January 2005, it was 2.8 ppmvd @ 15% O₂.
3. Unit 5 NOx emissions exceeded the District limit of 2.5 ppmvd @ 15% O₂ for 28.02 hours over the last three years of operation. Four minutes of this exceedance time was not exempted by District Rule 3:10, Excess Emissions.
4. Unit 5 NOx emissions exceeded the Demonstration limit of 2.0 ppmvd @ 15% O₂ for 296 hours over the last two years.

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Bennett/REU

06/23/05

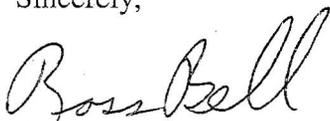
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5. Maintenance and repairs on the existing emission control system began shortly after start up and are continuing to the present. The redesign of the emission control device originally centered around the reformer reactor gas production and has currently led to the catalyst and sulfur poisoning of the catalyst. Additional SCOSox catalyst was added to the control device during the April 2005, outage.
6. SCONox catalyst washings have occurred at a frequency several times higher than anticipated during the three years of operation. These additional washings, for the sole purpose of maintaining NOx emission limits, have resulted in substantial downtime for Unit 5.
7. Load summary data indicate that Unit 5 has been operated at 24 megawatts or less for over 60% of total operating hours. Unit 5 is designed for 43 megawatts.

Based on the above findings, the District has determined that Redding Power is not able to reliably and continuously operate while maintaining the NOx demonstration limit of 2.0 ppmvd @ 15% O2. The NOx emission limit in the Permit to Operate and the Title V permit shall remain unchanged from the 2.5 ppmvd 1-hour rolling average @ 15% O2. Note 1 on condition 26 of District issued Permit to Operate #00-PO-39 and note 2 on Condition C7 of Title V Permit # 03-TV-02 that refer to the NOx demonstration limit will be removed as these permits are renewed.

If you have any questions regarding this determination please contact me at 225-5674.

Sincerely,



Ross Bell
Air Quality District Manager

RB/dd