

DATE: November 15, 1978

SUBJECT: BACT Baseline for Louisa Generating Station

FROM: Michael A. Trutna
Policy Development Section, SIB, CPDD

TO: Gale A. Wright, P.E.
Chief, Technology Analysis Section, Region VII

In your memo of October 13, 1978, (enclosed) you asked for assistance in determining the BACT baseline for the proposed construction at the Louisa Generating Station of the Illinois Gas and Electric Company (IIGE). Specifically, you asked how the September 19, 1978, proposal to revise the applicable NSPS for SO₂ from power plants might affect your BACT determination, notwithstanding you have determined that the revised standard itself will not apply (i.e., the boiler was ordered in the spring of 1978).

Since you have determined that a complete application was not received until May 31, 1978, I agree with your statement that the new PSD regulations activating Section 165 of the recent Act Amendments will apply. As you know, under the new PSD requirements, applicable sources must apply BACT. The resulting BACT determination must be made on a case-by-case basis taking into account several considerations including socio-economic costs and the anticipated environmental and energy impacts. In no event will BACT represent less control than provided by the applicable NSPS. Thus, as a minimum, the Louisa Station must at least meet the old NSPS as provided under the previous PSD regulations.

More importantly, case-by-case BACT may well require substantially more control than the old NSPS. The accepted practice within EPA is to make the initial presumption that all power plant applicants subject to the new PSD regulations can accomplish emission reductions at least equivalent to those required under the proposed NSPS revisions. This generally means that such sources will be expected to install a continuous sulfur removal system in the case of SO₂ control. Although the source may have filed a complete application before the date of NSPS proposal, information from well controlled sources that formed the basis for the NSPS revision was available well before IIGE's application was filed. Therefore, it is reasonable to expect that the Louisa Generating Station should plan to install a sulfur removal system which operates at 85% or higher control efficiency on a 24- hour basis unless they can present evidence of unusual circumstances which justify less control.

If I can be of any further assistance on the matter, please feel free to call on me.

Enclosure

cc: R. Rhoads
D. Tyler
D. Dunbar
R. Biondi
NSR Contacts, Regions I-X

DATE: October 13, 1978

SUBJECT: Best Available Control Technology (BACT) Determination

FROM: Gale A. Wright, P.E.,
Chief, Technology Analysis Section, Air Support Branch
Air and Hazardous Materials Division

TO: Michael Trutna
CPDD, (MD-15)
Environmental Protection Agency

Region VII has in process a prevention of significant deterioration (PSD) permit application from the Iowa-Illinois Gas and Electric Company, Davenport, Iowa, to construct on a new site, a 650-megawatt coal-fired power plant to be known as the Louisa Generating Station. The final information necessary for a complete application was received by EPA on May 31, 1978. This means of course that the Louisa Generating Station is subject to the new PSD procedures, rather than the ones that were in effect when the company originally filed its application in November 1977. The boiler for this unit was purchased in the spring of 1978. This is before the New Source Performance Standards (NSPS) for power plants were proposed. Therefore, this unit will not be affected by the September 19, 1978, proposal.

The question on which we request your assistance is a determination of the base line from which the BACT for this plant will be determined. Since this plant is not subject to the continuous sulfur removal requirement of the NSPS the company is not planning to install such a system. If we determine that such a system is necessary we can expect resistance from the company. If we determine that such a system is not necessary we can expect objections from one or more local environmental organizations.

We request your determination by October 27, 1978. If you need additional information to assist you in making your determination, please contact me at (FTS) 758-3791.

cc: Richard G. Rhoads
CPDD, (MD-15)
Environmental Protection Agency