

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET

ATLANTA, GEORGIA 30365
4APT-APB
FEB 13 1989
Mr. N. Ogden Gerald, Chief
Air Quality Section
Division of Environmental Management
North Carolina Department of Natural
Resources and Community Development
Post Office Box 27687
Raleigh, North Carolina 27611

Re: Craven County Wood-Energy Project (PSD-NC-121)

Dear Mr. Gerald:

We have reviewed your January 27, 1989, letter containing the final determination and final permit for the construction of the Craven County Wood-Energy project. Although our concerns were adequately addressed regarding the inclusion of specific test methods in the permit, we are presently unable to concur with the best available control technology (BACT) determination for nitrogen oxides (NOx) emissions until verification of the economic data is presented regarding the add-on NOx controls, as outlined below.

Subsequent to our January 11, 1989, meeting with yourself and representatives from Craven County's consulting firm, we have been in contact with EPA Headquarters concerning the economic feasibility of the Craven County project, if thermal deNOx were employed; specifically the discounted cash flow portion of the economic analysis presented by the applicant at the meeting. According to EPA Headquarters, the cash flow methodology and analytical framework used in the economic analysis was appropriate; however, a sensitivity analysis on the revenue and fuel cost assumptions together with interest rate and leverage factors resulted in findings counter to those in the applicant's analysis (see enclosure 1). Craven County contends that the proposed project would be viable even though the applicant's economic analysis shows: (1) declining revenues with rising fuel costs over time, notwithstanding thermal deNOx controls and (2) escalating woodwaste costs, even though prices for residual wood in the Southwest U.S. have been relatively stable in the past.

We request that the applicant provide additional justification for the following assumptions concerning the key variables which either make or break the project:

- a. The revenue stream over the project life, particularly the assumed rates for the years 2001 through 2005.
- b. The escalation rate for woodwaste prices (i.e., 1990 price of \$11.00 per ton for woodwaste rises to \$21.00 per ton in 2005).
- c. The depreciation schedule assumed for the analysis (i.e., write-off of equipment in five years).
- d. The inconsistent cost of capital for base plant (7.5%) and thermal deNOx (11.5%).

The applicant may wish to contact the following entities for obtaining the necessary information:

- a. North Carolina Utilities Commission, Electric Division for renegotiation of utility rates schedules (e.g., CSP-6c). Phone (919) 733-2267.
- b. Phillip Badger (TVA), Southeast Biomass Program, Mussel Shoals, Alabama for information on costs and availability for woodwastes. Phone (205) 386-3086.
- c. Robert Brooks (TVA), Norris, Tennessee. Project manager for a computer model of availability and costs for forest resources for the Southeast. Phone (515) 632-1513.
- d. Fred Allen, Georgia Forestry Commission, Macon, Georgia. Phone (912) 744-3357.
- e. The 1986 IRS (or later years) Tax Code for depreciation schedules.

In conclusion, we anticipate that once this additional information is presented we will be in a position to concur on the final permit and determination. Please respond to the issues set forth in this letter by February 28, 1989.

If you have any questions concerning this letter, please call me or Wayne Aronson of my staff at (404) 347-2864.

Sincerely yours,

Bruce P. Miller, Chief
Air Programs Branch
Air, Pesticides, and Toxics Management Division

Enclosure

cc: Mr. Frank L. Bunyard
ASB, AQMD, MD-12
RTP, NC 27711

Mr. Allen C. Basala, Chief
Economic Analysis Section
ASB, AQMD, MD-12
RTP, NC 27711

Mr. Bruce C. Bley, President
Craven Wood-Energy Project
Power Projects, Inc.
1000 Prospect Hill Road
Winsor, Connecticut 06095