

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

MAY 14 1987

MEMORANDUM

SUBJECT: Salt Water Drift from Cooling Towers

FROM: Gary D. McCutchen, Chief  
New Source Review Section, CPDD (MD-15)

TO: Bruce P. Miller, Chief  
Air Programs Branch, Region IV

This is in response to your April 10, 1987, memorandum regarding the determination of best available control technology (BACT) for the existing cooling towers at Florida Power Corporation's Crystal River units 4 and 5.

Your memo states that cooling tower emissions (particulate matter in the form of salt) were overlooked in 1979 at the time of the original prevention of significant deterioration (PSD) application for units 4 and 5. As a result, at that time they were neither required to apply BACT nor included in the ambient air quality analysis. This oversight has recently come to your attention. You wish to determine if current cooling tower emissions would have represented BACT at the time of the original application. The results of the BACT review are not going to be used to actually select BACT for the unit retroactively nor are they enforcement-related; they will be used for comparative purposes only. You have asked if we concur with your finding that BACT for the existing cooling towers should be based on proven technology available at the time the original PSD analysis was complete.

In this particular case, the requirement to apply BACT on an emissions unit was inadvertently overlooked by all parties involved in the processing of the original permit (applicant, reviewing agency, and public). Considering that the oversight was unintentional, occurred eight years ago, and is for comparative purposes only (not enforcement related), it would appear appropriate to determine BACT on proven technology available at the time of the original application. The analysis should, however, consider any policy guidance issued on BACT to date.

This decision should not be considered a precedent. It leaves undecided nearly all the important issues that would arise in cases where BACT is actually being derived after a source has been constructed (e.g., should retrofit costs be considered, should technology not available then be considered).

If you have any questions regarding this matter, please feel free to contact me at FTS 629-5592 or have your staff contact David Solomon at FTS 629-5375.

cc: NSR contacts

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV  
345 COURTLAND STREET  
ATLANTA, GEORGIA 30365

MEMORANDUM

DATE: APR 10, 1987

SUBJECT: Salt Water Drift From Cooling Towers

FROM: Bruce P. Miller, Chief  
Air Programs Branch

TO: Gary McCutchen, Chief (MD-15)  
New Source Review Section

Summary:

Region IV is requiring Florida Power Corporation (FPC) to reevaluate their air quality analysis for a previously issued PSD permit in order to include the TSP impact from two salt water cooling towers. At the time of the original PSD application (1979) we overlooked the requirement that the cooling tower emissions (particulate salt emissions) were to be included in the air quality analysis. We discovered this oversight as part of a current environmental impact assessment where R-IV is considering a requirement that FPC add three additional cooling towers to their facility to prevent further thermal deterioration in the Gulf of Mexico due to the current cooling water discharges. At present, two coal-fired boilers (Nos. 4 and 5) are each tied in with a cooling tower. Two other coal-fired boilers (Nos. 1 and 2) and a nuclear unit (No. 3) are being proposed for a tie-in to three proposed cooling towers. Before we can proceed with the additional cooling tower impact assessment, we find it necessary to determine the additional impact of the two existing cooling towers on the PSD increment and on the NAAQS.

In response to our requirement, FPC has submitted protocols for modeling and monitoring along with a request that the BACT analysis for the cooling towers should be based on the technology at the time the original PSD analysis was completed (1979). (See attached letter.) Region IV concurs with FPC's interpretation that BACT should be based on the technology at the time the original PSD analysis was completed.

Action:

Please let us know whether you concur with our position that the BACT determination should be based on proven technology at the time the original PSD analysis was completed. A response by April 20, 1987, is requested.

Enclosure