



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAR 22 1999

RECEIVED

4APT-ARB

Mr. C.H. Fancy, P.E.
Chief
Bureau of Air Regulation
Department of Environmental Protection
Division of Air Resources Management
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

MAR 29 1999

BUREAU OF
AIR REGULATION

SUBJ: Initial Performance Test Extension Requested for Unit No. 5 at the Lakeland Electric
McIntosh Power Plant, Lakeland, Florida

(P30-F1-245B)
1050004-006-AC

Dear Mr. Fancy:

The purpose of this letter is to provide you with written comments regarding a Lakeland Electric request for an extension of the deadline for conducting the initial performance test on the referenced combustion turbine, which will be subject to 40 C.F.R. Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines). In a letter dated February 22, 1999 addressed to the U.S. Environmental Protection Agency (EPA), Region 4 and that was also sent to the Florida Department of Environmental Protection, Lakeland Electric asked for an extension of the deadline for conducting an initial performance test on Unit No. 5 under New Source Performance Standards. Based upon our review of the company's letter, we have determined that its request for an extension of the initial testing deadline is reasonable, and we are providing this determination to you since your agency has been delegated the authority to implement Subpart GG in Florida.

According to the February 22, 1999 letter from Lakeland Electric, Unit No. 5 will be the first of a new series of turbines built by Westinghouse, and due to the large size of the unit, it will not be factory tested before it is installed at Plant McIntosh. Because this unit will be the first of its kind and due to the lack of factory testing, an extensive series of tests to evaluate the integrity and long-term operability of the turbine will be conducted over a period of approximately 13 weeks following the initial startup of the unit. After the completion of the this initial evaluation test period, the turbine will be disassembled to remove test equipment and to inspect hardware components. Once these inspections of the hardware components are completed, the unit will be reassembled and put into commercial service.

Unit No. 5 will be subject to a nitrogen oxides (NO_x) concentration limit in Subpart GG, and under the provisions of 40 C.F.R. §60.8(a), the company would have to conduct an initial performance test within 60 days after firing the turbine at its maximum operating rate or within

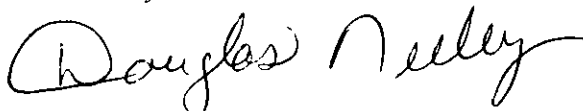
180 days after startup, whichever comes first. As an alternative to conducting the initial performance test within 60 days after reaching maximum production, Lakeland Electric has requested approval to delay the initial NO_x test until 30 days after the unit is reassembled and restarted following completion of the initial 13-week evaluation period. Depending upon when the turbine is first fired at its peak capacity, the deadline for testing the unit (i.e., 60 days after reaching maximum capacity) could fall within the 13-week period during which Lakeland Electric plans to conduct its initial evaluation of the turbine, or it could fall on a day on which the unit cannot operate because it has not yet been reassembled after the inspection of turbine hardware components.

Regardless of exactly when the deadline for testing falls, we believe that the Lakeland Electric proposal to conduct its initial performance test no later than 30 days after reassembling and restarting the turbine is acceptable. On September 29, 1977, the EPA issued a determination that allowed a company to delay its initial performance test until 30 days after restarting a facility that could not be tested by the deadline in 40 C.F.R. §60.8(a) due to equipment malfunctions that prevented the unit from operating. Based upon the precedent set by this previous determination, approval of the Lakeland Electric request for an extension of the deadline to conduct the initial performance test on Unit No. 5 would clearly be reasonable if the turbine has not been reassembled and is unable to run 60 days after it is first fired at its maximum operating rate.

Based upon the fact that the initial evaluation of the turbine will be conducted over a period of 13 weeks (81 days), the deadline for testing it could pass before the unit is disassembled if the unit is fired at its maximum operating rate early in the evaluation test period. If this were the case, Lakeland Electric could theoretically conduct a performance test on Unit No. 5 within 60 days after the turbine is fired at its maximum operating rate. Due to the fact that the turbine will be disassembled at the end of the 13-week evaluation test period, the results of a performance test conducted after the unit is reassembled are likely to be more representative of ongoing operation than a test conducted prior to the end of the evaluation period. Therefore, approving the Lakeland Electric request that it be allowed to delay its initial performance test until 30 days after the turbine is restarted following its reassembly is acceptable to EPA even if the 60th day after the unit is fired at its maximum operating rate is reached before the unit is disassembled.

If you have any questions about the issues addressed in this letter, please contact Mr. David McNeal of my staff at 404/562-9102.

Sincerely,



R. Douglas Neeley
Chief

Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division