

Florida Department of  
Environmental Protection

Memorandum

TO: Trina Vielhauer  
THRU: J. F. Koerner *JK*  
FROM: M. P. Halpin, P.E. *M*  
DATE: September 13, 2005  
SUBJECT: JEA  
PSD Permit Modification – low load operation on natural gas  
DEP File No. PA 00-43 (PSD-FL-310)

Attached is the public notice package for JEA's Brandy Branch permit modifications. The permit modification allows for Units 2 and 3 to operate on natural gas down to loads of 65 gross megawatts (approximately 35% output). This is an existing facility and neither a PSD Review nor a new determination of Best Available Control Technology (BACT) was required as a result of this request.

In support of the request, JEA has provided test results for its simple cycle Unit 1 (an identical, co-located combustion turbine), under tests which were authorized by the Department during October of 2004, which indicate that CO levels can be consistently maintained under 11 ppmvd @ 15% O<sub>2</sub> while operating at 65 megawatts. Currently, the permit limits CO emissions to 15 ppmvd @ 15% O<sub>2</sub> while firing natural gas and minimizes operation below 50% output (approximately 90 megawatts) as a result of expected increases in CO while operating at loads below 50%.

A preliminary review supports the applicant's contention that the existing permit condition limiting the low load to 50% may be relaxed while ensuring that all other permit conditions (emission limits) will be met.

I recommend your approval.

JFK/mph

Attachments