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BUREAU OF AIR REGULATION

Michael P. Halpin, P.E.
North Permitting Section
Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road,
Tallahassee, FL 32399-2400

Subject: Draft Title V Permit for JEA Brandy Branch Generating Station
Permit No. 0310485-013-AV

Dear Mr. Halpin:

JEA has reviewed the draft Title V Air Operation Permit (Draft Permit No. 0310485-013-AV) for the JEA Brandy Branch Generating Station (BBGS). On behalf of JEA, the following are our comments and/or requests regarding the draft permit:

1. Regarding condition A.11 of the draft permit, JEA requests that the references to ISO conditions be removed. The ISO condition correction equation in Subpart GG of 40 CFR Part 60 only applies to NO_x emissions from diffusion flame burners. It was compiled based on turbine manufacturer data from the 1970s. It was not developed for nor does it apply to current low NO_x burner technology. It does not apply to low NO_x burner technology used with the units fire natural gas. The specification that the emissions be expressed "at ISO conditions" should, therefore, be eliminated for the natural gas NO_x limit. The revised condition would read as follows: "While firing Natural Gas. The emission rate of NO_x in the exhaust gas shall not exceed 69.3 lb/hr (~~at ISO conditions~~) on a 24 hr block average as measured by the continuous emission monitoring system (CEMS). In addition, NO_x emissions calculated as NO₂ (~~at ISO conditions~~) shall not exceed 10.5 ppmvd @15% O₂ to be demonstrated by annual stack test. Note: Basis for lb/hr limit is 10.5 ppmvd @ 15% O₂, full load."
2. Conditions A.24 and B.24 of the draft permit stipulate fuel analysis requirements. Part of these conditions is the requirement that a fuel analysis be provided by the vendor. It shouldn't matter who does the fuel analysis, as long as the appropriate methods are used. As such, JEA requests that conditions A.24 and B.24 be modified as follows: "Fuel Oil Monitoring Schedule. The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 or superior grade fuel oil received at the Brandy Branch Power Plant, an analysis which reports the sulfur content of the fuel shall be provided ~~by the fuel vendor~~. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified entity. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d)."
3. It is noted that PSD permit PSD-FL-267 included VOC emission limits. The draft Title V permit does not include similar VOC emission limits for Unit 1. Is it the Department's intention not to transfer the PSD permit VOC emission limits to the Title V permit?
4. Several conditions in the draft permit include the need to submit various reports to specific agencies and in some cases multiple agencies. These include conditions 12, A.45, A.51, B.45, B.50, and B.51 of the draft permit. JEA requests that these conditions be changed to simply require that reports be submitted to the appropriate regulatory authority, rather than permit specified agencies.
5. Condition B.8 of the draft permit allows for normal operation down to a minimum level of 65 gross MW for Units 2 and 3. However, condition B.15 limits normal operation of units 2 and 3 to a minimum of 50% load. To avoid conflicting conditions regarding low load

- operation of Units 2 and 3, JEA requests that the following sentence be removed from condition B.15: "Operation below 50% output per turbine shall otherwise be limited to 2 hours in any 24-hour period except for periods of startup, shutdown or DLN tuning."
6. Regarding condition B.12 of the draft permit, JEA requests that the two references to ISO conditions be removed from this condition. The ISO condition correction equation in Subpart GG of 40 CFR Part 60 only applies to NO_x emissions. It was never intended to apply to CO emissions, so the "at ISO conditions" specification should, therefore, be eliminated. The revised condition would read as follows: "Carbon Monoxide (CO) and Volatile Organic Compounds (VOC). Emissions of CO in the stack exhaust gas (~~at ISO conditions~~) with the combustion turbine operating on any fuel (with duct burners on or off) shall not exceed 14 ppmvd @15% O₂, on a 24-hr block average to be demonstrated by CEMS. Emissions of VOC in the stack exhaust gas (baseload-~~at ISO conditions~~) with the combustion turbine operating on gas shall not exceed 6.81 lb/hour (4.0 lb/hour with duct burners off) and with the combustion turbine operating on oil shall not exceed 7.68 lb/hr, to be demonstrated by initial stack test using EPA Method 18, 25 or 25A. Thereafter, continuous monitoring of CO shall represent a surrogate for VOC emissions and provide assurance that the emission rates of the BACT Determination are being met."
 7. Condition B.16 of the draft permit includes requirements taken from condition 27 of PSD permit No. PSD-FL-310. There is some text missing from the original condition 27 wording in the first sentence of Condition B.16. JEA requests that this sentence be revised as follows, to read as it did in the PSD permit: "If excess emissions occur for more than two hours due to malfunction, the owner or operator shall notify the Environmental Quality Division of the City of Jacksonville (EQD) within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem."
 8. The last sentence of condition B.30 of the draft permit references condition B.51. It appears that this reference should be to B.40.
 9. In condition B.40 of the draft permit, the definition of parameter A in the ammonia slip calculation is missing. From corresponding condition 45 of PSD Permit PSD-FL-310, "A= Ammonia injection rate (lb/hr)/ 17 (lb/lb.mol)."
 10. Subsection C of the draft permit indicates that the fuel oil storage tanks are not subject to the provisions of 40 CFR 60, Subpart Kb. However, condition C.2 of the draft permit gives the recordkeeping requirements of Subpart Kb, with the given regulatory reference being a Subpart Kb requirement. Since the fuel oil tanks are not subject to Subpart Kb, JEA requests that condition C.2, which is a Subpart Kb requirement, be removed from the permit.

JEA appreciates the opportunity to work with the Florida Department of Environmental Protection in obtaining the required air quality permits for the JEA Brandy Branch Generating Station. Should you have any questions or concerns regarding the above comments on the draft permit, please do not hesitate to call Mr. Bert Gianazza of JEA at (904) 665-6247 or myself at (913) 458-2126.

Regards,



Bob Holmes
Air Quality Scientist
BLACK & VEATCH

cc: Bert Gianazza, P.E., JEA