ATTACHMENT E

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

MAY 3 2007

Mr. James E. Sydnor, Director
Air Division
Virginia Department of Environmental Quality
529 East Main Street
Richmond, Virginia 23219

Dear Mr. Sydnor:

This is in response to your April 17, 2007 request that the U. S. Environmental Protection Agency (EPA) review the proposed merging of stacks at Mirant's Potomac River Generating Station (PRGS), regarding whether Mirant could receive credit for the increased dispersion that would result in compliance with section 123 of the Clean Air Act, 42 U.S.C. §7423. As you indicated, Mirant has proposed to merge the existing five stacks into two at their PRGS. The proposed stack merge project will increase dispersion of pollutants by increasing the effective height at which emissions are released into the atmosphere. As you know, there are several provisions within 40 CFR §51.100 under which credit for increased dispersion may legitimately be granted toward the emission limitation under a state implementation plan (SIP). At this time we cannot provide a complete review and final determination of the acceptability of the proposed stack merger for credit. Such an EPA determination can result only through the agency's formal action on a SIP revision request. However, we can provide preliminary considerations which include information provided by John Britton for the City of Alexandria and Kevin Finto on behalf of Mirant.

The change in operation associated with the Administrative Consent Order (ACO) that was negotiated and entered into in June 2006 included the installation was of a trona injection system, which injects trona into gas stream to reduce sulfur dioxide. The model evaluation study (MES) protocol approved by EPA, and attached to the ACO, explicitly included the stack merge project although it was not specifically required by the ACO. If the Commonwealth of Virginia submits a request to revise its SIP or a reviewable permit which includes credit for merged stacks and amends the SIP, we intend to consider whether this information shows that the stack merging is part of a change in operation for which dispersion credit may be granted under 40 CFR §51.100(hh)(2)(ii)(B).

The emissions baseline against which PRGS's change in operation should be evaluated is another important factor we must consider in determining whether to approve a SIP revision request and grant credit for the merged stacks. The PRGS is currently required by the Virginia SIP to meet emission limits for SO_2 and PM10. The SO_2 emission limit of 9 VAC 5-40-930 is 1.52 pounds per million Btu (lbs/mmBtu). The PM10 emission limit of 9 VAC 5-40-900 is 0.12 lbs/mmBtu.

At this time we do not know what new emission limits for the PRGS may ultimately be established by Virginia. If the new allowable SO_2 limit were set at the level consistent with the fuel being burned (e.g., approximately 1.2 lb/mmBtu) it would be less than the current SIP allowable limit of 1.52 lb/mmBtu. It is conceivable, given our knowledge of recent developments, that the eventual limit could be one-half or less of the currently allowable limit. Similarly, the PM10 emission limit may ultimately be established at one-half or less of the current allowable limit of 0.12 lb/mmBtu. This information will also be relevant to a decision whether to approve any revision to the SIP for PRGS that includes credit for increased dispersion.

"Good Engineering Practice" or GEP, as it applies to stack heights may be of benefit in helping to ensure attainment of the ambient standards, as well as avoiding elevated localized concentrations associated with atmospheric downwash. In some cases, the reasonable protection of ambient air quality includes consideration of continuous controls in conjunction with GEP stack heights. In situations where a source is precluded from using a GEP stack height to minimize downwash it may be both logical and practical to attempt to accomplish the equivalent by other means, based on the facts presented. In the Mirant PRGS case, where the existing stacks at 48.2 meters are less than the de minimis GEP height of 65 meters, the other means may include the use of stack merging to ameliorate at least some of the deleterious effect of not having a GEP stack height. Previous EPA guidance supports consideration of this approach, if properly supported by available information and the case's specific facts.

If the documentation accompanying the SIP revision request or permit revision adequately demonstrates that the following criteria are satisfied, we expect that the SIP revision of permit revision could be proposed for approval, and we would not anticipate vetoing it absent contrary showings or unless other facts presented new concerns.

- The proposed stack merger is one element of an overall strategy to reduce ambient impacts caused by the facility, which includes the installation of controls (i.e., installation and operation of trona injection) and the merging of effluent flows from 5 units into 2 stacks, and may include a stack height increase of up to fifty feet.
- Allowable emissions will be reduced below current SIP allowable emissions, which are those existing prior to the temporary emergency operating order and ACO.
- Because the resulting stack height is less than GEP and Mirant wishes to take credit for the merger as making up all or part of the difference between actual stack height and GEP height, they would need to show through modeling that the resulting limit is no less stringent than they would qualify for using a GEP stack.

If these criteria are met, the stack merging would not be considered a prohibited dispersion technique under Clean Air Act section 123.