

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

500C Chestnut Street Tower II

JAN 12 1979

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. Denton:

In the Matter of the Applications of	)	Docket Nos. STN 50-518
Tennessee Valley Authority	)	STN 50-519
		STN 50-520
		STN 50-521

We have evaluated the feasibility of the charcoal filtration equipment on the containment exhaust of the Hartsville and Phipps Bend Nuclear Plants and as a result we plan to remove this equipment based on the following:

- a. The filters are not cost effective in their contributions to maintaining doses "as low as reasonably achievable" as required by Appendix I to 10 CFR Part 50. Our calculations show that the annual cost exceeds the benefit (assuming \$1000/man-thyroid rem) by greater than a factor of two for both the Hartsville and Phipps Bend Nuclear Plants.
- b. Testimony in the Hartsville Construction Permit hearing on March 1, 1977, by P. G. Stoddart of the NRC staff (see pages 6518 and 6523 of the hearing record) indicates that the NRC staff performed a cost/benefit analysis on the use of this equipment and also concluded that the filters were not cost beneficial.
- c. This topic was not considered separately in the Phipps Bend hearing because the filtration system was included within the GESSAR design. However, examination of the NRC dose calculations in NUREG-0168, tables 5.6, 5.7, and 5.11 (Phipps Bend Nuclear Plant Environmental Statement) show that the additional radionuclide release because of the removal of these filters will not result in doses to individuals above acceptable limits. Also, as stated previously in item a, the costs of keeping the filters in the design for Phipps Bend Nuclear Plant exceed the benefits derived from a dose reduction standpoint.

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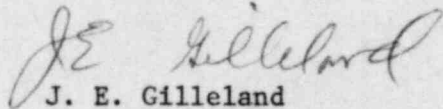
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- d. The containment purge radiation level is continuously monitored and if a high radiation level is encountered, the purge is automatically stopped. The containment atmosphere can then be processed through the standby gas treatment system before release.

To preclude any impact on the Hartsville and Phipps Bend schedules (design or construction) we would appreciate your informing us as soon as possible and by April 1, at the latest, if you do not agree with our position regarding this matter.

Very truly yours,

  
J. E. Gilleland  
Assistant Manager of Power