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Georgia Power
the southern electric system

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ELV-03308
1257

Docket Nos. 50-424
50-425

TAC-M82133
M82134

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT
ADDITIONAL INFORMATION AND AMENDED
TECHNICAL SPECIFICATIONS FOR FILTER HEATERS

Georgia Power Company (GPC) letter ELV-03182 dated November 11, 1991, transmitted a request for Technical Specification changes relative to the testing requirements for charcoal filters. At the request of the NRC, we are amending the request by providing additional information in this letter and in the attachments to this letter.

Enclosure 2 of letter ELV-03182 included the results of dose analyses which formed the bases for the proposed revisions to the Technical Specifications. These changes reflect the revised assumptions concerning leakage and filter efficiencies. The details of the effects of these changes on the original dose analyses are contained in proposed revisions to the description of the dose analyses in the FSAR. The proposed FSAR changes are included as attachment 1 to this letter. These are provided for information only and will be included in the annual FSAR update. These pages describe the dose analyses and the assumptions and results of the analyses.

Enclosure 2 of letter ELV-03182 referred to the fuel handling building post accident filter system. In the Technical Specifications, this system is identifed as the fuel handling building post accident ventilation system.

The revised dose analyses used to support the proposed changes included a revised emergency core cooling system (ECCS) leakage rate of 2 gpm for the duration of the accident. This is a reduction in the amount of leakage previously used in the analyses, but remains within the guidelines of Standard Review Plan 15.6.5.1 for plants with ESF filter systems. The previously assumed value of 50 gpm for the duration of the accident was larger than necessary. The NRC staff noted in the Safety Evaluation (NUREG-1137 dated June 1985) that the value could be substantially reduced. The new value of 2 gpm is well above the expected leakage and is consistent with the value accepted by the NRC for use in

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similar calculations for other plants. Technical Specification 6.7.4.a requires that this leakage be maintained "as low as practicable."

The control room emergency filtration system (CREFS) was originally sized to handle a flow of 25,000 cubic feet per minute (CFM). The flow allowed by the Technical Specification is 19,000 cfm with a 10 percent tolerance. Under these conditions the originally supplied heater has excess capacity. Analyses were performed to determine the required heater capacity at 19,000 ± 10 percent cfm. These analyses assumed maximum design temperature and 100 percent relative humidity for the inlet air. It was determined that only 74 kw of heater capacity is required to reduce the relative humidity to 70 percent. The heater capacity proposed for the Technical Specification is 95 kw at 460 volts, which assures that the necessary heater capacity will be available for the CREFS even during minimum voltage conditions.

The changes requested in letter ELV-03182 do not involve any modifications to the filter systems. Except for the CREFS, revised analyses have been performed to demonstrate that the filters will perform their safety function without the heaters; therefore, any contributions that the heaters make to the filters' efficiency will result in additional conservatism.

Since the revised dose analyses did not take credit for the heaters, the required heater capacities in the Technical Specifications were revised. The revision included the replacement of the heater requirements range with a minimum heater requirement. The heater capacity upper limit is not required to limit excessive heat dissipation by the heaters. The thermal overload trips that are an existing part of the system are unaffected by this proposed change. There are no changes to the heaters, the heater controls, power supplies, or the provisions that protect the charcoal from ignition. Therefore, the proposed change will not affect the level of fire protection provided for the charcoal filters.

The proposed Technical Specifications retained the requirement to perform laboratory testing of the charcoal filters in accordance with ANSI N510-1980. It is understood that ANSI N510 requires that such testing be done according to ASTM D3803. The NRC has suggested that the Technical Specifications would be improved by referring directly to ASTM D3803-89. This does not change the requirements of the Technical Specifications or the conclusions of the evaluation of significant hazards that was included with letter ELV-03182. Therefore GPC is amending the requested Technical Specification changes to include references to ASTM D3803-89 for laboratory testing of charcoal. The revised pages are included as attachment 2 to this letter. The reference to ASTM D3803-89 is also applicable to the surveillance requirements for the control room filters on page 3/4 7-15 which was not affected by the initial request in letter ELV-03182. This page is also included in attachment 2, along with revised instructions for incorporating the changes into the Technical Specifications. The pages in attachment 2 should replace the pages in enclosure 3 of ELV-03182 on a one for one basis.

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Surveillance requirement 4.9.12.f. is not affected by the proposed changes to the technical specifications. During the review of this page the NRC noted that this surveillance requirement differed from similar requirements for other systems in that it required removal of 99 percent instead of 99.95 percent of the test gas. The reason for this difference is that no credit is taken for the fuel handling building post accident ventilation system in the safety analyses. Rather than remove the system from the initial issue of the Technical Specifications, GPC requested, and was granted, slightly less stringent testing requirements for this system.

Mr. C. K. McCoy states that he is a vice president of Georgia Power Company and is authorized to execute this oath on behalf of Georgia Power Company and that, to the best of his knowledge and belief, the facts set forth in this letter are true.

GEORGIA POWER COMPANY

By: C. K. McCoy

Sworn to and subscribed before me this 23rd day of January, 1992.

Notary

MY COMMISSION EXPIRES MAY 6, 1995

CKM/HWM/gmb

xc: Georgia Power Company
Mr. W. B. Shipman
Mr. M. Sheibani
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U. S. Nuclear Regulatory Commission
Mr. S. D. Ebneter, Regional Administrator
Mr. D. S. Hood, Licensing Project Manager, NRR
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State of Georgia
Mr. J. D. Tanner, Commissioner, Department of Natural Resources