



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 139 TO FACILITY OPERATING LICENSE NO. DPR-53
AND AMENDMENT NO. 122 TO FACILITY OPERATING LICENSE NO. DPR-69
BALTIMORE GAS AND ELECTRIC COMPANY
CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2
DOCKET NOS. 50-317 AND 50-318

INTRODUCTION

By its letter dated June 9, 1988, as supplemented October 25, November 17 and December 28, 1988, the Baltimore Gas and Electric Company (BG&E; the licensee) requested that the Calvert Cliffs Units 1 and 2 Technical Specification (TS) 5.6.1, "Criticality - Spent Fuel," be modified by increasing the enrichment limit for fuel which may be stored in the spent fuel storage racks from 4.1 to 5.0 weight percent U-235. This change was evaluated and found to be acceptable, in the NRC Safety Evaluation dated March 7, 1989, contingent upon the acceptability of the NRC generic fuel handling accident analysis. This NRC generic accident analysis has been deemed satisfactory and so, was utilized to bound the results of the Unit 2 Cycle 9 fuel handling accident reanalysis that was conducted to evaluate the effects of a core enrichment increase to 4.35 weight percent U-235. This analysis was provided in the NRC Safety Evaluation for Unit 2 Cycle 9 operation dated January 10, 1990.

DISCUSSION

TS 5.6.1, "Criticality-Spent Fuel," is modified to increase the enrichment limit of irradiated fuel stored in the spent fuel storage racks to less than or equal to 5.0 w/o U-235. This change was evaluated and found to be acceptable in the NRC Safety Evaluation dated March 7, 1989 but was withheld until the NRC generic fuel handling accident analysis was determined to be satisfactory. This generic analysis is now approved for NRC use and subsequently, was utilized to bound the results of the reanalysis of a fuel handling event at Calvert Cliffs Unit 2 with 4.35 w/o U-235 enriched fuel in the NRC Safety Evaluation for Unit 2 Cycle 9 operation, dated January 10, 1990. Therefore, this change remains acceptable and shall no longer be withheld.

INTENT

The intent of the proposed changes is to permit the storage of fuel, with enrichment levels up to and including 5.0 w/o U-235, in the spent fuel storage racks.

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10.0 STATE CONSULTATIONS

A Notice of Consideration of Issuance of Amendments to Facility Operating Licenses and Opportunity for Prior Hearing was published in the Federal Register on August 8, 1988 (53 FR 28791). No hearing requests or intervention petitions were received. The State of Maryland was consulted on this matter and had no comments on the determination.

Pursuant to 10 CFR 5.21, 51.32 and 51.35, an environmental assessment and finding of no significant impact was published in the Federal Register on January 30, 1989 (53 FR 4352).

Accordingly, based upon the environmental assessment, the Commission has determined that issuance of these amendments will not have a significant effect upon the quality of the human environment.

12.0 CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated:

PRINCIPAL CONTRIBUTORS:

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