



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 114 AND 97

TO FACILITY OPERATING LICENSE NOS. DPR-53 AND DPR-69

BALTIMORE GAS AND ELECTRIC COMPANY

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-317 AND 50-318

Introduction

By applications for license amendments dated April 26, 1985 and June 28, 1985, Baltimore Gas and Electric Company (BG&E) requested changes to the Technical Specifications for Calvert Cliffs Units 1 and 2.

The proposed changes to the Unit 1 and Unit 2 Technical Specifications (TS) 3/4.8.2.3, "D.C. Distribution-Operating" and TS 3.8.2.4, "D.C. Distribution-Shutdown" are as follows: (1) the Limiting Condition for Operation (LCO) and associated Actions are changed to reflect use of the station "Reserve Battery", (2) a modification is made to the battery cell voltage and capacity test, and (3) a grammatical error would be corrected. Consideration of the above items concludes the actions on the applications dated April 26, 1985 and June 28, 1985.

Discussion and Evaluation

With regard to use of the "Reserve Battery", on July 31, 1979 and November 2, 1981, the staff issued Amendment Nos. 40 and 22, and Amendment Nos. 58 and 40 to the Facility Operating Licenses for Calvert Cliffs Units 1 and 2, respectively. Those license amendments provided TS for the use of a "Reserve Battery" as a replacement for any one of the site's four vital 125 v batteries if one is unavailable due to surveillance testing or is otherwise inoperable. The staff's safety evaluations in support of these amendments concluded that the reserve battery and associated interconnections are fully safety grade, the reserve battery installation provides protection for the battery that is equivalent to the existing 125 v battery installations at Calvert Cliffs and, because the same surveillance is required on the reserve battery as on the normal vital batteries, the reserve battery is an acceptable replacement for a vital battery.

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The April 26, 1985, proposed TS change adds to the LCO of the DC Distribution System the option of utilizing the reserve battery in lieu of a vital battery. This option existed originally only in the action statements, which put in effect TS 3.0.4 that prohibited entry into other operational modes when using the reserve battery. The proposed change would therefore allow entry into other operating modes when using the reserve battery as a replacement for a vital battery.

The proposed change would also allow use of the reserve battery as a replacement for a vital battery in operational modes 5 and 6, as described in TS 3.8.2.4, as well as modes 1 through 4, as described in TS 3.8.2.3. The original specification allowed its use only in operational modes 1 through 4.

An additional proposed change to the LCO would add the word "associated" when discussing the battery and charger for each train in the LCO, in TS 3.8.2.3 and 3.8.2.4. This is to specify that the battery and charger must both be part of that respective train.

The staff has already concluded that the "Reserve Battery" can be freely used on a vital 125 volt bus. In addition, the proposed changes do not in any way affect the reliability or capacity of the vital 125 v DC system. Accordingly, the changes to the LCOs for TS 3.8.2.3 and 3.8.2.4 are acceptable.

A final proposed change to the LCO for TS 3.8.2.3 would delete two Action statements and change a third Action statement. These action statements allowed the reserve battery to replace the normal vital battery during the surveillance tests which render the tested battery inoperable. Because the LCO would now recognize the reserve battery as a replacement for a vital battery in any circumstances, the surveillance condition need not be accounted for in the Action statements. Accordingly, the deletion of the referenced Action statements and renumbering the remaining Action statements would provide consistency within the proposed LCO and are, therefore, acceptable.

With regard to the battery capacity tests, the June 28, 1985, proposed TS would change the battery service test surveillance TS 4.8.2.3.2.d.2 for the 125 v vital batteries 12 and 22 to reflect their updated design load cycle. The loads of the updated design load cycle are greater than the simulated or dummy loads currently used for batteries 12 and 22 during the battery service test performed every 18 months. The load cycle time periods remain unchanged (2 hours total endurance). BG&E states that a safety analysis has been completed which verifies that 125 v batteries 12 and 22 have ample capacity to supply power for the updated design load cycle. This proposal would also increase the battery minimum terminal voltage required to be maintained during the battery service test for the four vital 125 v batteries from 100 volts to 105 volts. A voltage of 105 volts is required for operability of the emergency loads supplied by the batteries. BG&E states, in their June 28, 1985 application, that a safety analysis has been conducted which verifies that all the 125 v batteries have adequate capacity to supply the emergency loads for the design load cycle while maintaining battery terminal voltage of at least 105 volts.

Both the revised load cycle test and the increased terminal voltage represent more rigorous surveillance that increases the confidence that the 125 v DC vital batteries will perform as required. The proposed changes to the TS 4.8.2.3.2.d.2 represents more stringent surveillance requirements. Therefore, the proposed changes are acceptable.

Finally, a change has been proposed to TS 3.8.2.4 to correct a grammatical error. The word "bus" would be changed to "busses" to provide proper grammatical agreement with the remainder of the LCO requirements. Correction of these types of errors are administrative in nature and do not change the requirements of the TS. Accordingly, the proposed change to TS 3.8.2.4 to correct a grammatical error is acceptable.

#### Environmental Consideration

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and a change in surveillance requirements. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously published a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR §51.22(c)(9). Pursuant to 10 CFR §51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

#### 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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