



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 169 TO FACILITY OPERATING LICENSE NO. DPR-53
AND AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-69
BALTIMORE GAS AND ELECTRIC COMPANY
CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-317 AND 50-318

1.0 INTRODUCTION

By letter dated March 28, 1991, as supplemented April 16, 1991, and February 28, 1992, the Baltimore Gas and Electric Company (the licensee) submitted a request for changes to the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2, Facility Operating License Nos. DPR-53 and DPR-69. The request was for administrative changes to the licenses and changes to the Technical Specifications (TS) which involve editorial changes, administrative corrections, and the deletion of footnotes that are no longer applicable. The licensee has also proposed to replace entirely the TS contained in Appendices "A" and "B" to improve the quality of the document. A third party was contracted to retype the TS, as discussed above, and certify the accuracy in relation to the proposed changes. The licensee also performed a 100% verification of the equations, numerical values, graphs, scientific notations, and text after the third party certification. By this amendment, all previous amendment numbers which appeared on TS pages would be removed. Each page would only display the number of the proposed amendment.

The initial request, dated March 28, 1991, identified the requested changes to both the license and TS for each unit including twenty administrative changes and provided a proposed no significant hazards consideration determination. The April 16, 1991, supplement provided marked-up copies of the Units 1 and 2 licenses and TS. The submittal also indicated that the final revised copies of the TS would be provided for issuance at a later date. The revised TS were word processed to provide greater compatibility with industry practice and allow for an easier more accurate revision process in the future. The licensee indicated that the revised TS would be certified as accurate and correct in accordance with the requested changes.

The February 28, 1992, submittal provided the revised licenses and TS for both units. The submittal also provided the administrative corrections, previously provided in the initial submittal, and the specific footnotes which are no longer applicable. The administrative corrections included five additional administrative corrections in addition to those provided in the initial submittal. These administrative corrections include item numbers 3, 11, 12,

17, and 23 in Section 2 of this safety evaluation. These additional administrative corrections are consistent with those considered in the initial proposed no significant hazards consideration determination. Therefore, the initial determination is not affected.

As noted, the initial request and supplements included revising the license of each unit to delete the following outdated license conditions: 2.D. (Unit 1), 2.C.3. and 2.C.4. (Unit 2). This portion of the licensee's request is not addressed in this safety evaluation. The licensee is reconsidering this aspect of the initial request and it will be addressed at a later date.

2.0 EVALUATION

The editorial changes to the TS for both units would: make all pages unit specific; make all pages single-sided; remove all intentionally blank pages; renumber pages which are alpha-numeric; place "Defined Terms" (Section 1.0) in alphabetical order; capitalize the first letter of system names; rename the "Index" as the "Table of Contents;" add numbers to the LCO titles so that they are consistent with the Table of Contents; renumber the figures and tables so that they are in numerical order including appropriate reference changes and correction of typographical errors.

As discussed in Section 1.0 of this safety evaluation, the revised TS were retyped and were certified to be in accordance with the proposed marked up TS. The certification process included independent parallel text entry, electronic text entry, and a qualified senior engineer review. This was subsequently verified by a 100% review of the revised text including confirming the accuracy of the equations, numerical values, graphs, and scientific notations.

The staff has determined that this portion of the proposed TS changes is acceptable. This determination is based on the editorial nature of the changes, the third party certification, and the 100% verification by the licensee.

The licensee has also proposed administrative corrections to the TS for both units as follows:

1. Table 2.2-1 (Units 1 and 2).

Replace "psig" by "psia" in the "Allowable Values" column of item 9.a.

The staff has reviewed the proposed change and verified that a typographical error was introduced by Amendment Nos. 71 and 61 for Units No. 1 and 2, respectively. Therefore the staff finds the change acceptable.

2. Bases 2.1.2 (Unit 1).

Replace "3215 psia" by "3125 psia".

The staff has reviewed the proposed change and verified that a typographical error was introduced by Amendment No. 130. Therefore, the staff finds the change acceptable.

3. Bases 2.1.2 (Units 1 and 2).

Replace "1969" by "1968" in the reference to ANSI B31.7, class I.

The staff has reviewed the proposed change and verified that the reactor coolant system piping, valves, and fittings are designed and built to the draft 1968 edition, as documented in Combustion Engineering Report No. CENC 1179, entitled "Analytical Report for Baltimore Gas & Electric Calvert Cliffs Station Units I and II Piping." Therefore, the staff finds the change acceptable.

4. Section 4.1.1.1.1 (Unit 1).

Insert "line" after "limit."

The staff has reviewed the proposed change and verified that the word "line" had been inadvertently removed by Amendment No. 130. Therefore, the staff finds the change acceptable.

5. Section 3/4.1.1.1 (Units 1 and 2).

Insert an asterisk (*) after the "limit line of Figure 3.1.1-1" in three different places.

The staff notes that Figure 3.1.1-1 is designated as Figure 3.1-1b in the current TS. Editorial changes, as proposed by the licensee and approved by the staff above, have resulted in the renumbering of Figure 3.1-1b to 3.1.1-1. The staff also notes that Section 3/4.1.1.1, as proposed for corrections by the licensee, does not exist. Therefore, the sections proposed for corrections should read "Sections 3.1.1.1 and 4.1.1.1.1."

The staff has reviewed the proposed changes and verified that the asterisk had been inadvertently removed by Amendment Nos. 130 and 123 for Unit Nos. 1 and 2, respectively. Therefore, the staff finds the change acceptable.

6. Table 3.3-3 (Unit 2).

Insert "Actuation Systems" and "(Trip buttons)" in items 9. and 9.a., respectively. Add "(AFAS)" to item 9. after "Actuation Systems."

The staff has reviewed the proposed changes and verified that the words "Actuation Systems" and "(Trip Buttons)" were omitted by error from item 9. and 9.a. when Amendment No. 61 was issued. Therefore, the staff finds the changes acceptable. The staff also finds acceptable the addition of "(AFAS)" to item 9. for consistency with Unit 1 TS.

7. Table 3.3-5 (Unit 2).

Reinsert the note "(1) Header fill time not included."

The staff has reviewed the proposed change and verified that the note, which applies to Item 4.a., was inadvertently removed by Amendment No. 61. Therefore, the staff finds the change acceptable.

8. Table 3.3-6 (Units 1 and 2).

Replace "200 mr/hr" by "220 mr/hr" in 1.a.i.

The staff has reviewed the proposed change and verified that the error was introduced by correction letter dated May 8, 1990. The alarm/trip setpoint value of 220mr/hr is the correct value. Therefore, the staff finds the change acceptable.

9. Table 4.3-4 (Units 1 and 2).

Add the title "Seismic Acceleration Recorder" to item 3.

The staff has reviewed the proposed change and concludes that it is acceptable to add this title to item 3 of Table 4.3-4 for consistency with Table 3.3-7.

10. Table 3.3-11 (Units 1 and 2).

Unit 1: Replace "104/106" by "104/116." Remove "4" in the "FLAME" column and add "1" in the "SMOKE" column for room 111. Add "4" in the "FLAME" column and remove "1" in the "SMOKE" column for room 112/114.

Unit 2: Delete "113" in the "ROOM/AREA" column and delete the corresponding entries in the "INSTRUMENT LOCATION" column and in the "SMOKE" column.

The staff has reviewed the proposed changes for Unit 1 and concluded that the changes are acceptable since their purpose is to reflect plant configuration.

The staff has reviewed the proposed deletion of room/area "113" for Unit 2 and verified that "113" had been inadvertently added to Unit 2 Table 3.3-11 by correction letter dated March 13, 1986. Therefore, the staff finds this change acceptable.

11. Table 3.3-11 (Unit 1).

Replace "12 MSIV Hyd Area" by "East Piping Area" for room 224.

The staff has reviewed the proposed change which would provide consistency of terminology between Table 3.3-11, and the Alarm Manual and plant practice. The staff finds this change acceptable.

12. Table 3.3-11 (Unit 1).

Replace "586-590" by "586/588/589/590;" replace "595-597" by "595/596/597." On the next two lines add room "587" with the corresponding instrument location "Frisker Area" and add room "591" with the corresponding instrument location "Clothing disposal." Replace "521-523" by "523/594."

The licensee states that, as a result of refurbishing in the Auxiliary Building, the room/area numbers and instrument location names do not reflect the actual location of 20 smoke detectors currently listed in the "SMOKE" column. The staff has reviewed the proposed changes and find these changes acceptable, since they reflect plant configuration.

13. Table 3.6-1 (Unit 2).

Insert " ≤ 7 " in the "ISOLATION TIME" column for the 4 isolation valves of penetration No. 1A.

The staff has reviewed the proposed change and verified that " ≤ 7 " was inadvertently deleted by Amendment No. 47. Therefore, the staff finds this change acceptable.

14. Section 3/4.6.5 (Units 1 and 2).

Replace "4.6.5.1" and "4.6.5.2" by "4.6.5.1.1" and "4.6.5.1.2," respectively.

The staff has reviewed the proposed changes and verified that two different surveillance requirements had been given, by mistake, identical numbers, 4.6.5.2. The licensee proposed to renumber the hydrogen analyzers surveillance requirements as 4.6.5.1.1 and 4.6.5.1.2 to differentiate these from the electric hydrogen recombiners surveillance requirements. Therefore, the staff finds these changes acceptable.

15. Section 3.7.1.1a (Unit 1).

Replace "otherwise, be in at least HOT STANDBY within the following 30 hours." by "otherwise, be in at least HOT STANDBY within the next 5 hours and in COLD SHUTDOWN within the following 30 hours."

The staff has reviewed the proposed change and verified that a partial deletion of this ACTION statement had been inadvertently introduced by Amendment No. 104. Therefore, the staff finds this change acceptable.

16. Section 3/4.7.8 (Unit 1).

Replace "4.7.8.b and c" by "4.7.8.1.b and c" in ACTION statement 3.7.8.1 and replace "4.7.8.d" by "4.7.8.1.d" in surveillance requirements 4.7.8.1.b and 4.7.8.1.c.

The staff notes that the changes proposed by the licensee have already been incorporated in Unit 1 TS by Amendment No. 159. The licensee agrees with this finding.

17. Section 3.7.11.5 (Units 1 and 2).

Move 3.7.11.5a, "#5 yard hydrant..." and 3.7.11.5b, "#7 yard hydrant..." before the APPLICABILITY statement.

The staff has reviewed the proposed changes and agrees with the licensee that the APPLICABILITY statement should precede the items to which it applies. Therefore, the staff finds these changes acceptable.

18. Section 4.9.12.C. (Units 1 and 2).

Replace "Regulatory Guide, Revision 2," by "Regulatory Guide 1.52, Revision 2."

The staff has reviewed the proposed change and verified that "1.52" was inadvertently omitted when Amendment Nos. 142 and 125 were issued for Units 1 and 2, respectively. Therefore, the staff finds this change acceptable.

19. Section 3/4.12 (Units 1 and 2).

Insert "3/4.12.1 Monitoring Program" under "3/4.12 Radiological Environmental Monitoring."

The staff has reviewed the proposed change and verified that the heading "3/4.12.1 Monitoring Program" was correctly listed in the index pages but inadvertently omitted from Section 3/4.12 by Amendment Nos. 105 and 86 for Units 1 and 2, respectively. Therefore, the staff finds this change acceptable.

20. Bases 3/4.2.2, 3/4.2.3 and 3/4.2.4 (Unit 1)

Delete "... and Local Power Density - High LCOs and LSSS setpoints remain valid. An AZIMUTHAL POWER TILT > 0.10 is not expected and if it should occur, subsequent operation would not be restricted to only those operations required to identify the cause of this unexpected tilt."

The staff has reviewed the proposed change and notes that correction letter dated July 24, 1991, had already deleted the paragraph quoted above, which was inadvertently duplicated by Amendment No. 104. The licensee agrees with this finding.

21. Bases 3/4.7.1.6 (Units 1 and 2).

Delete Bases 3/4.7.1.6.

The staff has reviewed the proposed change and verified that, Amendment Nos. 59 and 41 for Units 1 and 2, respectively, deleted Section 3/4.7.1.6 but failed to delete the corresponding Bases. Therefore, the staff finds this change acceptable.

22. Section 6.4.1 (Units 1 and 2).

Replace "Appendix "A" of 10 CFR Part 55" by "10 CFR 55.59(c)."

The staff has reviewed the proposed change and verified that, as indicated in (H)(1) of Federal Register Notice 52 FR 9459, "10 CFR 55.59(c)" has replaced "Appendix "A" of 10 CFR Part 55." Therefore, the staff finds this change acceptable.

23. Section 6.4.2 (Units 1 and 2).

Replace "Supervisor-Planning and Support" by "Manager-Nuclear Safety and Planning Department."

The staff has reviewed the proposed change and finds it acceptable since the proposed title reflects the actual title of the individual responsible for the training program of the fire brigade.

24. Section 6.5.4.2 (Unit 2)

Add "and shall collectively have expertise in all of the areas for 6.5.4.1."

The staff has reviewed the proposed change and verified that a partial omission of 6.5.4.2 was inadvertently introduced by Amendment Nos. 108 and 91 for Units 1 and 2, respectively. Therefore, the staff finds the change acceptable.

25. Section 6.10.2 (Units 1 and 2)

Delete 6.10.2 Item 1

This deletion corrects an erroneous reference to TS Section 6.13 which was deleted by Amendment Nos. 108 and 91 for Units 1 and 2, respectively. The current TS Section 6.13 addresses "System Integrity," not environmental qualification. The staff has reviewed the proposed change and finds it acceptable.

In addition to administrative corrections, the licensee has proposed the deletion of footnotes as follows:

Footnote No. 1 - Section 4.4.10.1.1 (Units 1 and 2).

Delete "Reactor coolant pump flywheel inspections for the first inservice inspection interval may be completed during Unit 1 Refueling Outage No. 10 (RFO-10) in conjunction with the reactor coolant pump motor overhaul program."

The staff has reviewed the proposed deletion of the footnote and finds it unacceptable. The RFO-10 is currently in progress and the request for deletion of the footnote will be reconsidered when the reactor coolant pump flywheel inspections have been completed, documented, and a subsequent request for deletion of the footnote submitted.

Footnote No. 2 - Section 4.7.8.1 (Units 1 and 2)

Delete "*The Steam Generator snubbers 1-63-13 through 1-63-28 need not be functionally tested until the refueling outage following June 30, 1985."

The staff notes that the footnote proposed for deletion does not appear on Unit 2 TS. Consequently, the staff has reviewed the proposed deletion of the footnote applicable to Section 4.7.8.1 for Unit 1 only and concluded that the footnote is no longer applicable. Therefore, the staff finds the deletion acceptable.

Footnote No. 3 - Bases 3/4.1.2 and 3/4.1.3 (Units 1 and 2).

Delete "Revised by NRC Letter dated 09/11/91."

The staff has reviewed the proposed deletion of the footnote applicable to Bases 3/4.1.2 and 3/4.1.3 and recognizes that the proposed retyping of the TS will delete this reference to the revision letter dated September 11, 1991. Therefore, the staff finds this deletion acceptable.

Footnote No. 4 - Bases 3/4.2.1 (Units 1 and 2).

Delete "Revised by NRC letter dated July 18, 1991."

The staff has reviewed the proposed deletion of the footnote applicable to Bases 3/4.2.1 and recognizes that the proposed retyping of the TS will delete this reference to the revision letter dated July 18, 1991. Therefore, the staff finds this deletion acceptable.

Footnote No. 5 - Bases 3/4.2.5 (Unit 1).

Delete "Revised by NRC letter dated May 23, 1990."

The staff has reviewed the proposed deletion of the footnote applicable to Bases 3/4.2.5 and recognizes that the proposed retyping of the TS will delete this reference to the revision letter dated May 23, 1990. Therefore, the staff finds this deletion acceptable.

Footnote No. 6 - Bases 3/4.6.1.4, 3/4.6.1.7 and 3/4.6.2.2 (Units 1 and 2).

Delete "Revised by NRC Letter dated May 23, 1990."

The staff has reviewed the proposed deletion of the footnote applicable to Bases 3/4.6.1.4, 3/4.6.1.7, and 3/4.6.2.2 and recognizes that the proposed

retyping of the TS will delete this reference to the revision letter dated May 23, 1990. Therefore, the staff finds this deletion acceptable.

Footnote No. 7. - Sections 6.1 and 6.2 (Units 1 and 2).

Delete "effective at 12:01 a.m. on November 30, 1988. Replaces page 6-1(t)."

The staff has reviewed the proposed deletion of the footnote applicable to Sections 6.1 and 6.2 and concluded that the footnote should have been deleted when Amendment Nos. 161 and 141 were issued. Therefore, the staff finds the deletion of the footnote acceptable.

The staff has reviewed the proposed administrative corrections and deletion of the footnotes, as detailed above, and has determined that they are acceptable with the exception of Footnote No. 1 - Section 4.4.10.1.1 (Units 1 and 2). As noted, this request will be considered at a future time.

Summary: Based on the details included in the above evaluation, the staff has concluded that the proposed changes to the Unit 1 and Unit 2 TS are acceptable with the noted exception of the request to delete Footnote No. 1 - Section 4.4.10.1.1 (Units 1 and 2). These changes are administrative in nature and do not make any substantive changes to the TS.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Maryland State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The amendments relate to changes in recordkeeping, reporting, or administrative procedures or requirements. The NRC 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 issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (56 FR 20028). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) 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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