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ARTHUR E. LUNDVALL, JR.
VICE PRESIDENT
SUPPLY

December 22, 1983

Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

ATTENTION: Mr. James R. Miller, Chief
Operating Reactors Branch #3

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 & 2, Docket Nos. 50-317 & 50-318
Request for Amendment

- REFERENCES: (1) BG&E Letter from Mr. A. E. Lundvall, Jr., to Mr. R. W. Reid, dated May 1, 1978
- (2) BG&E Letter from Mr. A. E. Lundvall, Jr., to Mr. R. A. Clark, dated December 12, 1980
- (3) BG&E letter from Mr. A. E. Lundvall, Jr., to Mr. J. R. Miller, dated September 20, 1983, Request for Amendment
- (4) Safety Evaluation by the Directorate of Licensing, USAEC, in the Matter of Baltimore Gas and Electric Company, Calvert Cliffs Nuclear Station, Units 1 and 2, dated August 28, 1972

Gentlemen:

The Baltimore Gas and Electric Company hereby requests an Amendment to its Operating License Nos. DPR-53 and DPR-69 for Calvert Cliffs Unit Nos. 1 & 2, respectively, with the submittal of the enclosed proposed changes to the Technical Specifications.

CHANGE NO. 1 (BG&E FCR 83-141)

Remove existing pages 3/4 8-1 and 3/4 8-2 of the Unit Nos. 1 and 2 Technical Specifications and replace with attached, marked up pages 3/4 8-1 and 3/4 3-2, Attachment (1) of this transmittal.

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DETERMINATION OF SIGNIFICANT HAZARDS CONSIDERATIONS

This proposed change is administrative in nature. In License Amendments 58 and 40 for Units 1 and 2, the Safety Evaluation concluded that the 69KV SMECO offsite power circuit met the requirements of General Design Criterion 17 regarding offsite power circuits. Previously, Baltimore Gas and Electric Company had requested allowance to replace an offsite power circuit with the 69KV SMECO off-site power circuit in the **ACTION** requirements. The location of the asterisk in the **ACTION** requirements could lead to misinterpretation of the **ACTION** and **OPERABILITY** requirements.

In addition, the Safety Evaluation Report for License Amendments 58 and 40 listed a surveillance requirement which BG&E had committed to perform whenever the 69KV SMECO offsite power circuit is in use. This proposed change to the Technical Specifications includes the surveillance requirement in the existing Technical Specifications, to provide clarification of this commitment.

Lastly, the proposed change deletes mention of the automatic shift from the normal to alternate circuit. This automatic shift is already performed under Technical Specification Surveillance Requirement 4.8.1.1.2.c.3. Therefore, these three proposed changes consist of an administrative clarification, and conform with the guidance provided in the Federal Register Notice 14870, dated April 6, 1983, Examples of Amendments That Are Considered Not Likely To Involve Significant Hazards Consideration, item (i), in that the proposed change will not:

- (1) involve any increase in the probability or consequences of an accident previously evaluated, or
- (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or
- (3) involve any reduction in the margin of safety.

CHANGE NO. 2 (BG&E FCR 83-143)

Remove existing pages 3/4 8-8 through 3/4 8-10 of the Unit 1 and 2 Technical Specifications and replace with attached marked up pages 3/4 8-8 through 8-10, Attachment (2) to this transmittal.

DETERMINATION OF SIGNIFICANT HAZARDS

This proposed change to the Technical Specifications provides clarification of the surveillance requirements for 125V DC bus train batteries. License Amendments 58 and 40 for Units 1 and 2, respectively, recognized the reserve battery as an acceptable replacement for one 125V DC station battery. The manner in which this reserve battery is used during surveillance testing requires a clarification of the surveillance requirements regarding verification of battery capacity.

Whenever a battery capacity verification test is to be performed for a station 125V DC battery, the reserve battery is placed upon the 125V DC bus and serves as the station battery for the duration of the test. Because the reserve battery is **OPERABLE** when it is placed on the bus, the second part of surveillance requirement 4.8.2.3.2.d.2 is no longer a valid requirement. While the battery capacity test is performed on the dummy load, and during subsequent recharging, the reserve battery can still serve as the power supply to the bus. Using this configuration will allow the discharged battery to be charged in a normal manner, using the reserve battery charger versus using the DC bus battery chargers for the 24 hour period specified in the Technical Specifications. This will prolong the life of the station batteries and improve overall battery system reliability. Additionally, if the reserve battery remains on the bus during the recharging period, safety will be improved by ensuring an essentially fully charged battery is on the DC bus at all times.

To ensure the DC bus battery chargers are still verified operable through periodic surveillance, a separate 18 month surveillance requirement has been specified through proposed specification 4.8.2.3.2.e, using a dummy load.

During periods when the Reserve Battery may not be available, surveillance requirement 4.8.2.3.2.d.1 would be utilized. This involves using existing DC loads to discharge the station battery while it is supplying the DC bus. During this test, the battery chargers must be disconnected from the bus. A clarification to **ACTION** 3.8.2.3.c has been proposed to exclude applying the **ACTION** specified while the battery chargers are disconnected per surveillance requirement 4.8.2.3.2.d.1. A surveillance requirement which requires verifying the battery charger to be operable (proposed specification 4.8.2.3.2.e) and the requirement to recharge the station battery within 24 hours to 95% capacity has been proposed to ensure the discharged station battery is recharged as quickly as possible.

ACTION requirement 3.8.2.3.d has been revised slightly to establish consistency between surveillance requirement 4.8.2.3.2.d and this **ACTION** requirement.

No previously analyzed accident in the Updated FSAR is affected by this proposed change, since it only provides consistency and clarification between the existing **ACTION** and surveillance requirements. No new accidents previously unanalyzed will be created by this proposed change, since no modifications to the intent of the specifications are being made. No reduction in the margin of safety will result from the proposed change, since the bases for Technical Specification 3.8.2.3 are still being satisfied and safety may actually be improved due to prolonged life of station batteries as described above, and allow maintaining a fully charged battery on the DC bus to the maximum possible extent.

Based upon the above considerations, we have concluded that the proposed change represents an example of an amendment that is considered not likely to involve significant hazard considerations under Section (i), as described on Page 14870 of Federal Register Notice dated April 6, 1983.

CHANGE NO. 3 (BG&E FCR 83-142)

Insert new pages 3/4 4-32 and 33 and B3/4 4-13 of the Unit 1 Technical Specifications and pages 3/4 4-33 and 34 and B3/4 4-13 of the Unit 2 Technical Specifications, Attachment (3) to this transmittal.

DETERMINATION OF SIGNIFICANT HAZARDS CONSIDERATIONS

This proposed Technical Specification change is being processed in response to a request by the Nuclear Regulatory Commission in Generic Letter 83-37 to incorporate the newly installed Reactor Coolant System Vents into the Technical Specification. Although every attempt was made to follow the "guidance" in the model Technical Specifications, some of the **ACTION** requirements are deemed too restrictive for our facility, due to inaccessibility of the RCS vents system during power operation. In addition the **APPLICABILITY** has been specified as **MODES** 1 and 2, as previously discussed with Mr. D. H. Jaffe, of your staff. It is our position that **MODES** 1 and 2 should be the applicable **MODES** of concern for this system, since the postulated accidents which could lead to generation of noncondensable gases of sufficient volume to hamper natural circulation will be of greatest concern in these **MODES**. This is additionally supported by the **MODE APPLICABILITY** of the C-E Standard Technical Specifications for Combustible Gas Control in the containment and its associated bases.

This proposed Technical Specification change has been reviewed against the requirements for 10 CFR 50.92, and it has been determined that the proposed change will not:

- (1) result in any increase in the probability or consequences of an accident previously evaluated, or
- (2) create the possibility of a new or different kind of accident from any previously evaluated, or
- (3) result in any reduction in the margin of safety.

The proposed change to the Technical Specifications constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications, and therefore, has been determined to involve no significant hazards considerations.

CHANGE NO. 4 (BG&E FCR 83-1044) Unit 2 Only

Remove existing pages 3/4 7-27 through 7-31, 7-39, 7-41, 7-42 and 7-44 of the Unit 2 Technical Specifications and replace with revised pages, Attachment (4) to this transmittal.

DETERMINATION OF SIGNIFICANT HAZARDS CONSIDERATIONS

This proposed change identifies hydraulic shock and sway suppressors which are included in Table 3.7-4 of the Unit 2 Technical Specifications which BG&E plans to replace with sway struts during upcoming Unit 2 refueling outages. The associated snubbers have been proposed for removal by a re-evaluation of the piping thermal movement. Most of these piping lines have only very slight movement under thermal loading (i.e., less than 1/32"). None of the associated piping will experience a measurable increase in imposed moment due to thermal growth with the associated snubbers removed. The hydraulic snubbers were originally installed in the affected piping because they were considered state-of-the-art supports. The sway struts will be installed with the same geometry as the existing snubbers and will be capable of carrying all required loads, including normal, transient, and analyzed accident loads.

Although the attached Technical Specification changes show all scheduled Unit 2 modifications, some or all may not be performed during the upcoming Unit 2 refueling outage scheduled to begin in April 1984. Therefore, we will submit a list of those actually modified after the modifications have been completed.

We have reviewed the proposed change against the requirements of 10 CFR 50.92 and have determined that the change involves no significant hazards considerations.

- (1) Since all analyzed accident loadings can be carried by the sway struts, and thermal movement is insignificant, there is no significant reduction in the margin of safety as a result of these proposed changes.
- (2) It will not result in any increase in the probability or consequences of any accident previously evaluated.
- (3) It will not create the possibility of a new or different kind of accident from any accident previously evaluated.

CHANGE NO. 5 (BG&E FCR 83-1054) Unit 2 Only

Remove existing pages 3/4 7-26, 3/4 7-26b, 3/4 7-45, and 3/4 7-46 of the Unit 2 Technical Specifications, and replace with the attached, marked-up pages 3/4 7-26, 3/4 7-26b, 3/4 7-34, and 3/4 7-46, Attachment (5) to this transmittal.

DETERMINATION OF NO SIGNIFICANT HAZARDS

The Baltimore Gas and Electric Company plans to modify Steam Generator Support Snubbers 2-63-11 through 2-63-26 by installing dedicated hydraulic reservoirs, mounted on Seismic Category I for each of these snubbers. This represents a significant improvement to safety, since these snubbers are currently served by a common hydraulic reservoir.

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References (1) and (2) forwarded our intention to perform monthly surveillance of reservoir fluid level in lieu of providing an individual dedicated reservoir for each snubber. This decision was made based on recommendations from the Architectural Engineer and ITT Grinnell (the snubber manufacturer) as well as plant staff. However, since these snubbers are to be functionally tested during the refueling outage following June 30, 1985, and each monthly surveillance test requires a containment entry at power, we have decided, based upon revised recommendations from ITT Grinnell, to modify the snubbers by providing the dedicated reservoirs during the upcoming Unit 2 spring 1984 refueling outage, scheduled to begin April 1984.

These snubbers serve to restrain sudden lateral movement of the steam generator under seismic conditions, and are described on Pages 4-8 and 4-9 of the Updated Final Safety Analysis Report.

The Technical Specification Bases describe the visual inspection requirements of Technical Specification 3/4 7-8 as "maintaining a constant level of snubber protection to systems."

The proposed change does not involve any increase in the probability or consequences of an accident previously evaluated on the Updated FSAR. This is because with dedicated reservoirs the snubbers will no longer be subject to possibility of the common mode failure which existed with the common reservoir. Although this failure mode was improbable, the dedicated reservoirs do offer an improvement to safety.

No new or different kind of accidents from those previously evaluated in the Updated FSAR are created by this proposed change. This is because the snubbers are still available to provide the dynamic load support function during a design basis seismic event.

The proposed change does not involve a reduction in the margin of safety as described in Technical Specification Bases 3/4 7-8. This is because with the exception of the special visual inspection requirement for snubbers with common reservoirs, the **OPERABILITY ACTION**, and **SURVEILLANCE** requirements will not be changed.

CHANGE NO. 6 (FCR 82-174)

Revise page 3/4 8-1 of Unit 1 Technical Specifications with the attached pages (Attachment No. 6).

DISCUSSION AND DETERMINATION OF SIGNIFICANT HAZARDS

In the Technical Specifications, the operability of each diesel generator in **MODES** 1, 2, 3, or 4 requires that each one have available, "A common fuel storage system consisting of two independent storage tanks each containing a minimum volume of 18,250 gallons of fuel . . ." (Technical Specification 3.8.1.1.b, Attachment 6). Therefore, if only one fuel oil storage tank is available it renders all of the diesels inoperable. The Technical Specifications require either returning the diesels to operable status within two hours or being in **HOT STANDBY** within the next six hours. This clearly makes any inspection of a fuel oil storage tank, which requires the tank be drained, impossible without first shutting down both units. It is unlikely that a simultaneous unit outage of greater than ten days will be scheduled.

Indication of leaks in fuel oil tank bottoms at other non-BG&E fossil facilities has pointed out the necessity of periodic inspection of fuel oil storage tanks. A plan to inspect these tanks by visual inspection and statistical metallurgical sample of the tank bottom using ultrasonic depth meters has been developed. This cannot be done at present due to the restrictive nature of our Technical Specifications. To alleviate this situation a change to the existing Technical Specifications must be implemented.

The proposed change requires that two redundant sources of diesel fuel oil be maintained even with one of the two fuel oil storage tanks out of service for inspection. This will be accomplished by use of an 8,000 gallon alternate fuel source, enough to run two diesels for 21.1 hours at full load. Furthermore, it limits the period of time these inspections can be performed to the April 1984 Unit 2 refueling outage when Unit 2 reactor is in **MODE** 5 or 6. This restriction contributes to safety since the diesels role in accident mitigation is not as great in these operational modes.

This proposed change will not result in any significant increase in the probability or consequences of any accident analyzed in the Updated FSAR. No new previously unanalyzed accident will be created by the proposed change, since the inspection of the diesel fuel oil storage tanks will actually contribute to safety by ensuring the integrity of this system. The proposed change to the Technical Specifications will not result in any significant reduction in the margin of safety as described in Technical Specifications Bases 3/4.4.8. Based on the above considerations this change has been determined to involve no significant hazards per 10 CFR 50.92.

CHANGE NO. 7 (BG&E FCR 83-104, Unit 1 Only)

Delete old page 3/4 6-9e. Replace old page 3/4 6-25 with attached mark-up page deleting the footnotes on Table 3.6-1 referring to TS 3.6.1.8 and containment vent isolation valves. (Attachment No. 7)

DISCUSSION

This proposed change to the Technical Specifications will permit periodic containment venting during normal plant operations.

By our letter of September 20, 1983, we requested that the Calvert Cliffs Technical Specifications be changed to indicate the addition of a Safety Injection Actuation Signal (SIAS) to containment isolation valves MOV-6900 and MOV-6901 (hydrogen purge system exhaust line). We indicated that this change was needed to support our plans for redesignating the hydrogen purge system exhaust line for use as a containment vent line. In accordance with these plans, we also requested Technical Specification coverage (new TS 3/4.9.14) for operation of the new containment vent system. This specification would allow periodic venting during all operational modes except during the performance of core alterations or movement of irradiated fuel within the containment. An interim license condition (TS 3/4.6.1.8) was proposed which would prohibit venting operations while in **MODES** 1 through 4 until a detailed evaluation of such operations was completed.

The above Technical Specifications changes were approved by your letter dated November 17, 1983, and the addition of SIAS to the containment vent line isolation valves has subsequently been completed.

This amendment request provides the results of our detailed evaluation demonstrating the acceptability of the proposed venting operations and requests deletion of the interim license condition mentioned above.

DETERMINATION OF SIGNIFICANT HAZARDS CONSIDERATION

Our plan for redesignating the hydrogen purge system exhaust line as a containment vent line was reviewed to ensure continued capability for adequate combustible gas control following a design basis Loss of Coolant Incident (LOCI) and to ensure that the vent system satisfied all applicable regulatory criteria for venting during normal operations. In Reference (3), we stated that the hydrogen control function following a LOCI would be more than adequately performed by the installed redundant hydrogen recombiners. Therefore, we stated we had planned to delete reference to the hydrogen purge system in the Updated Final Safety Analysis Report (FSAR) and install a blind flange on the air replenishment portion of the system.

After a careful review of the Calvert Cliffs design basis documentation and the standards for combustible gas control found in 10 CFR 50.44, we have decided to maintain the capability to purge the containment atmosphere as a supplementary and diverse means for post-LOCI hydrogen control.

Our decision to maintain a hydrogen purge capability is based, in part, on the fact that FSAR Section 6.8.3 and 14.21 identify the hydrogen purge system as a backup means for control of combustible gases should both recombiners fail to function properly. This backup role was noted briefly in Reference (4).

Our statement that the post-LOCI hydrogen control function would be more than adequately performed by the hydrogen recombiners was based on the provision of both a purge capability and recombiners at Calvert Cliffs appearing to exceed the minimum hydrogen control requirements for facilities which filed construction permit applications prior to 1969. The code of Federal Regulations, Title 10 CFR 50.44 (g) states:

"... For facilities with respect to which the notice of hearing on the application for a construction permit was published on or before December 22, 1968, if the combined radiation dose at the low population zone outer boundary from purging (and repressurization if a repressurization system is provided) and the postulated LOCI calculated in accordance with 100.11(a)(2) of this chapter is less than 25 rem to the whole body and less than 300 rem to the thyroid, only a purging system is necessary, provided that the purging system and any filtration system associated with it are designed to conform with the general requirements of Criteria 41, 42, and 43 of Appendix A to this part. Otherwise, the facility shall be provided with another type of combustible gas control system (a repressurization system is acceptable) designed to conform with the general requirements of Criteria 41, 42, and 43 of Appendix A to this part. If a purge system is used as part of the repressurization system, it shall be designed to conform with the general requirements of Criteria 41, 42, and 43 of Appendix A to this part. The containment shall not be repressurized beyond 50 percent of the containment design pressure."

The evaluation of post-LOCI purging operations contained in FSAR Section 14.21 demonstrates that resultant doses, when combined with the LOCI doses, would be within 10 CFR Part 100 limits. Consequently, the hydrogen purge system would have been acceptable as the primary and sole means of combustible gas control at Calvert Cliffs. Since we installed redundant hydrogen recombiners as the preferred means of combustible gas control, 50.44 (g) might be interpreted to allow these recombiners to be credited as an alternate and possibly sole means for hydrogen control, in lieu of the purge system. In this case, deletion of the hydrogen purge system would be justified because the level of protection against combustible gases, as required by 10 CFR 50, would not have been significantly decreased. However, such action would reduce this level of protection below that which is required for facilities whose application for construction permit was filed after 1969 (10 CFR 50.44 (e) requires recombiners, in addition to the capability for controlled purging and/or repressurization).

Consequently, the discussion of the hydrogen purge system contained in the FSAR will not be deleted but will be modified, reflecting the additional function of the exhaust portion as a vent pathway during normal operations. Hereafter in this discussion the "hydrogen purge exhaust line" will be referred to simply as the "containment vent line." The addition of SIAS to the containment vent line isolation valves will not degrade the hydrogen control function of the system. FSAR Section 6.8.3.2 states that purging would not be initiated earlier than 9.55 days following a LOCI. After a LOCI, SIAS will only be in effect while containment pressure exceeds 4.75 psi. Extrapolation of FSAR Figures 14.20-8 through 14.20-18 indicates that containment pressure can be expected to drop below this value within one to three days. There are no postulated mechanisms that could result in a containment repressurization above 4.75 psia or stabilization of pressure, in the long term, above 4.75 psia.

An evaluation was performed against the criteria contained in Containment Systems Branch Technical Position CSB 6-4, "Containment Purging During Normal Operations," to assess the adequacy of the system to serve as a containment vent pathway during normal operations. The areas specifically addressed were as follows:

1. System design criteria,
2. Operability of the isolation valves under post-LOCI conditions,
3. The radiological consequences of venting during a LOCI,
4. The effect of venting on ECCS performance,
5. The effects of venting on the function of safety-related equipment located beyond the vent system, and
6. The maximum allowable leak rate of the containment vent system isolation valves.

The containment vent system piping was designed and installed as per ASME Nuclear Class 2, seismic Category 1. It consists of a four-inch schedule 40 pipe, running from inside containment through the containment penetration and leading to the penetration room exhaust system. Inside containment the line contains a moisture separator (with fixed blades) and an automatic isolation valve, MOV-6900. Outside containment the line contains an automatic isolation valve, MOV-6901, and a flow meter. At the flow meter the line reduces to a two inch diameter.

The penetration room exhaust system is seismic Category 1 and uses continuously welded duct, drawing air from the penetration rooms through a filter bank and out of the plant. All of the components in this system are qualified to operate under post-LOCI environmental conditions.

MOV-6900 and MOV-6901 are environmentally qualified for post-LOCA operations. Normally, these valves would remain shut, but would periodically be opened for durations sufficient to relieve internal containment pressure. Venting operations would be accomplished by opening MOV-6900 and MOV-6901, via key-operated handswitches located on control room panel 1C10. Direct indication of valve position is provided on the same panel. Initiation of SIAS from either of two diverse parameters (containment pressure high or pressurizer pressure low) would result in automatic closure of these valves within 20 seconds. The fixed-blade moisture separator located upstream of the isolation valves will preclude the introduction of solid debris into the vent line.

The following assumptions and analytical methods were used to assess the radiological consequences of venting operations during the onset of a LOCI (worst postulated scenario).

1. REACTOR COOLANT ACTIVITY CONCENTRATIONS

Only iodine isotopes were considered. These isotopes are controlling for two reasons. First, a pre-existing iodine spike was assumed which raises the reactor coolant concentration to its maximum Technical Specification limit. Concentrations of noble gases are not affected by this spike and remain at the normal operating levels. Secondly, the limiting offsite doses from a LOCI are to the thyroid. These are the result of iodine isotopes only.

2. THERMAL HYDRAULIC DATA

A 2.0 ft² hot leg break is analyzed because it results in the highest peak containment pressure. Data from FSAR Table 14.20-14 is used for the reactor coolant blowdown from the break. The containment pressure and temperature profiles are illustrated in FSAR Figures 14.20-11 and 14.20-13, respectively.

3. REACTOR COOLANT FLASHING FRACTIONS

The amount of reactor coolant which flashes to steam is calculated from the temperature profile. All of the iodine in the flashed reactor coolant is assumed to be available for release from the containment.

4. MIXING OF THE CONTAINMENT ATMOSPHERE

The radioactivity contained in the flashing reactor coolant is not assumed to be instantaneously mixed throughout the entire containment free volume. Rather, the reactor coolant blowdown is assumed to be completely mixed with the containment atmosphere at 100 seconds into the accident. To account for partial mixing at times earlier than 100 seconds, the volume in which radioactivity is mixed is taken as a fraction of the containment free volume.

5. CONTAINMENT VENT LINE DATA

The containment vent line is assumed to be operating when a LOCI occurs. The isolation valves are four inch gate valves located in series upstream of a two inch flow reducer. The valves are assumed to be two inches in size to account for this flow reducer. Time-dependent flow rates from the containment to the environment were calculated assuming sonic flow through an orifice.

6. ISOLATION VALVE CLOSURE TIME

The closing time of the valves has been conservatively calculated to be 50 seconds from accident initiation to full closure of the valves. This period assumes a loss of offsite power and includes the following:

	<u>TIME (sec.)</u>
1. Containment Pressure Response (4.75 psig)	2.4
2. SIAS Response and function	47.6*

- * This total signal and function response time is conservative with respect to the 20-second response time requirement for the containment vent isolation valves (TS Table 3.6-1) and the 30 second signal and function response time requirement for SIAS per TS Table 3.3-5.

7. DOSE CALCULATIONS

The activity released from the containment is transported to the site boundary and low population zone without credit for decay or depletion. Atmospheric relative concentrations are taken from FSAR Figure 2.3-3 for a 0-2 hour time interval. Breathing rates appropriate for an accident are used.

The doses resulting from a LOCI are listed in the following table. The first column identifies the contribution to the doses from the open containment purge valves. The second column lists the doses resulting from the maximum hypothetical accident discussed in FSAR Section 14.24.

POST-LOCA DOSES (Rem)

	<u>CONTAINMENT VENT (0-50 Sec)</u>	<u>MAXIMUM HYPOTHETICAL ACCIDENT</u>	<u>TOTAL</u>	<u>10 CFR 100 DOSE LIMIT</u>
SITE BOUNDARY:				
Thyroid	0.12	94	94	300
Whole Body	Negligible	2.2	2.2	25
LOW POPULATION ZONE:				
Thyroid	0.03	33	33	300
Whole Body	Negligible	0.8	0.8	25

It can be seen that the worst-case potential dose contribution from containment vent line operation is insignificant. The total LOCI doses are well within the limits of 10 CFR 100. Thus, the operation of the containment vent line during full power operation is justified according to BTP CSB 6-4 Section B.5.A.

The results of the LOCI analysis indicate that a maximum of 1424.3 cubic feet of containment atmosphere would be introduced into the penetration room exhaust ventilation ductwork. This represents less than .074% of the containment free volume and will not degrade the operability of safety-related equipment located outside containment.

Based on the small amount of mass removed from the containment, a pressure change of less than one psi would be expected. It has been determined that a pressure change of this magnitude would have no effect on ECCS performance.

The vent line isolation valves are covered by Appendix J integrated leak rate testing requirements. Therefore, no additional limits on leakage or leak rate testing need be specified.

In conclusion, deletion of Technical Specification 3/4.6.1.8 and operation of the containment vent line under the provisions of proposed Technical Specification 3/4.9.14 do not involve a significant hazards consideration. The probability or consequences of accidents previously evaluated (LOCI) will not be significantly increased. Operation of the containment vent line will not create the possibility of a new or different kind of accident from any accident previously evaluated. The containment vent line design provisions and associated administrative controls will maintain the margin of plant safety as identified in the Updated FSAR and the Technical Specifications Bases.

This proposed determination is consistent with the examples of license amendments not likely to involve significant hazards considerations as published in Federal Register Notice 14870. Deletion of TS 3/4.6.1.8 and the subject footnotes on TS Table 3.6-1 to permit periodic venting during normal operations is an action which compares favorably with examples (iv) and (vi) in that it:

- (1) constitutes relief, granted upon demonstration of acceptable operation, from an operating restriction that was imposed because acceptable operation had not yet been demonstrated at the time of our initial notification of intent (see Reference 3), and
- (2) involves a change which either may result in some increase to the consequences or probability of a previously-analyzed accident (LOCI) or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to (containment vent) system(s) specified in the Standard Review Plan (Section 6.2.4).

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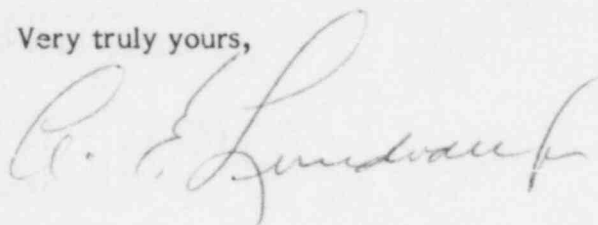
SAFETY COMMITTEE REVIEW

These proposed changes to the Technical Specifications and our determination of significant hazards have been reviewed by our Plant Operations and Off-Site Safety Review Committees, and they have concluded that implementation of these changes will not result in an undue risk to the health and safety of the public. The forthcoming supplemental detailed safety analysis will be submitted following additional safety committee reviews.

FEE DETERMINATION

We have determined, pursuant to 10 CFR Part 170 paragraph 170.22, that this Amendment request consists of seven changes of the Class III type incorporated as one Class IV and one Class I Amendment. Accordingly, we are including BG&E Check Number A116437 in the amount of \$12,700 to cover the fee for this request.

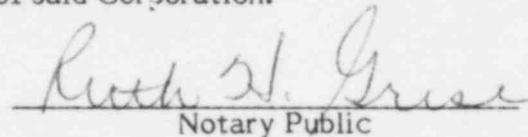
Very truly yours,



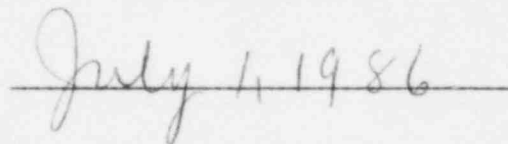
STATE OF MARYLAND :
: TO WIT:
CITY OF BALTIMORE :

Arthur E. Lundvall, Jr., being duly sworn states that he is Vice President of the Baltimore Gas and Electric Company, a corporation of the State of Maryland; that he provides the foregoing response for the purposes therein set forth; that the statements made are true and correct to the best of his knowledge, information, and belief; and that he was authorized to provide the response on behalf of said Corporation.

WITNESS my Hand and Notarial Seal:


Notary Public

My Commission Expires:



AEL/JET/LES/JRS/BSM/gla

Attachments

cc: J. A. Biddison, Esquire
G. F. Trowbridge, Esquire
D. H. Jaffe, NRC
R. E. Architzel, NRC
R. E. Corcoran, Chief (DHMH)