



CHARLES CENTER • P. O. BOX 1475 • BALTIMORE, MARYLAND 21203

October 12, 1983

ARTHUR E. LUNDVALL, JR.
VICE PRESIDENT
SUPPLY

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

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 82-135)

Change surveillance requirement 4.7.6.1 as shown on the attached marked-up page 3/4 7-18 for Unit 1 & 2 Technical Specifications.

DETERMINATION OF SIGNIFICANT HAZARDS CONSIDERATIONS

The Control Room/Cable Spreading Room ventilation system consists of a year round safety related air conditioning system serving both Unit Nos. 1 and 2. Air conditioning is required in these rooms to regulate the temperature under which safety related equipment must function. The ventilation system is a redundant system as required by Technical Specification 3.7.6.1.

Acc
11

Mr. James R. Miller
October 12, 1983
Page 2

In order to provide better operating conditions for operators during the summer, the safety related air conditioning system has been augmented with additional trains of non-safety related air conditioning equipment consisting of a chilled water coil system installed in existing ventilation ductwork, two chill water pumps, and a 220-ton chiller unit. All electrical and mechanical components of the safety related and non-safety related systems are independent of each other with the exception of the existing ductwork and fans.

Because the chiller unit is not safety grade, surveillance must be done on the safety grade units to ensure operability. The proposed Technical Specification would accomplish this by proving that the emergency air conditioners would maintain control room air temperature $< 104^{\circ}\text{F}$ for at least 12 hours every 62 days on a staggered test basis. This would be consistent with our existing frequency for surveillance requirements for the HEPA and charcoal filter adsorber trains (Technical Specification 4.7.6.1).

Amending the Technical Specifications as described above would allow normal operation with the non-safety grade units running and the emergency units on standby. During emergency or non-emergency conditions the safety grade units would automatically start with no operator action if the temperature in the control room rose above the thermostat setpoint. This would minimize run time on the safety grade units, further enhancing their availability during an emergency.

The proposed change will not result in any change to the existing bases for Technical Specification 3/4 7.6. The temperature under which equipment and instrumentation are required to operate will not change and there will be no noticeable effect on control room habitability.

This modification will not result in any change in system function as described in the Updated Final Safety Analysis Report (FSAR) section 9.8.2.3. This document will be updated to reflect the new system configuration. Section 14 of the Updated FSAR will not require updating because the Control Room/Cable Spreading Room air conditioning system is not specifically mentioned in any of the design bases accident analysis. Neither the ability to maintain the control room temperature below specified limits, nor the ability to protect the operators from airborne radioactivity, will be affected by this modification.

The proposed change to the Technical Specifications does not involve a significant increase in the probability or consequences of an accident previously evaluated by the FSAR. This change does not result in the possibility of a new or different kind of accident than previously evaluated. Finally, there will be no significant reduction in the margin of safety as a result of this change.

CHANGE NO. 2 (BG&E FCR 83-66)

Remove old page 3/4 3-26 and replace with marked up page 3/4 3-26 incorporating the change, which is applicable to both Unit Nos. 1 and 2. The change modifies the measurement range shown on Table 3.3-6 for the containment gaseous and particulate activity monitors to conform with the actual ranges on installed equipment.

DETERMINATION OF SIGNIFICANT HAZARDS

Recently, while reviewing the monitoring instrumentation used for reactor coolant system leakage detection, it came to our attention that the actual measurement range provided on the installed containment atmosphere monitor (C.A.M.) as reflected in the C.A.M. technical manual, the Updated FSAR, and on the C.A.M. meter face, was one decade less than the range listed in Table 3.3-6 of the Technical Specifications. Further investigation has shown that the actual range (10 to 10 cpm vice 10 to 10 cpm per Table 3.3-6) is acceptable for performing its intended function. The containment atmosphere monitor gas detector provides monitoring and alarm capability for the predominant isotope, Xe-133, (expected to be) present in the containment atmosphere as a result of reactor coolant system (R.C.S.) leakage. The particulate detector provides monitoring and alarm capability for the various particulate isotopes expected to be present due to R.C.S. leakage. The C.A.M., whose sole purpose is R.C.S. leakage detection, is one of several detection systems and methods used for this function, including the containment sump level alarm, pressurizer pressure and level indication and alarm, containment humidity indicators, reactor coolant makeup water flow integrators, and R.C.S. inventory analysis.

The Final Safety Analysis Report contains a table depicting C.A.M. response times associated with various percentages of failed fuel. The minimum sensitivity described in the FSAR for the detection of Xe-133 is within the range of installed equipment. Review of the technical manual for the C.A.M. showed the measurement range of 10 to 10 to be correct. The correct range is also shown in the Updated FSAR for both the gaseous and particulate detectors.

Through an evaluation of the Updated FSAR, the technical manual and the Technical Specifications, we have determined that granting this change will not involve a significant increase in the probability or consequences of accidents previously evaluated, nor does it create the possibility of a new or different kind of accident. There is no reduction in the margin of safety used in the bases for the Technical Specifications. Based on these conclusions and the nature of the change requested, we have determined there is no significant hazards consideration associated with the proposed license amendment.

Mr. James R. Miller
October 12, 1983
Page 4

FEE DETERMINATION

For fee determination purposes only we request that you consider this request for amendment as a supplement to our submittal dated September 20, 1983.

BALTIMORE GAS AND ELECTRIC COMPANY

Arthur E. Lundrall

AEL/JRS/JET/sjb

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
7/1/86

My Commission Expires

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

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

4.7.6.1 The control room emergency ventilation system shall be demonstrated OPERABLE:

- a. ~~At least once per 12 hours by verifying that the control room air temperature is $\leq 120^{\circ}\text{F}$.~~
- b. At least once per 31 days by initiating flow through each HEPA filter and charcoal adsorber train and verifying that each train operates for at least 15 minutes.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housing, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
 1. Verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of $2000 \text{ cfm} \pm 10\%$.
 2. Verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of $2000 \text{ cfm} \pm 10\%$.
 3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample from either at least one test canister or at least two carbon samples removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (130°C , 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

a. At least once per 62 days by deenergizing the backup control room air conditioner and verifying on a staggered test basis that the emergency control room air conditioners maintain the air temperature $\leq 104^{\circ}\text{F}$ for at least 12 hours.

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ALARM/TRIP SETPOINT</u>	<u>MEASUREMENT RANGE</u>	<u>ACTION</u>
1. AREA MONITORS					
a. Containment					
i. Purge & Exhaust Isolation	3	6	≤ 220 mr/hr	$10^{-1} - 10^4$ mr/hr	16
2. PROCESS MONITORS					
a. Containment					
i. Gaseous Activity					
a) RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10^1 - 10^6$ 1 - 10⁶ cpm	14
ii. Particulate Activity					
a) RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10^1 - 10^6$ 1 - 10⁶ cpm	14

Mr. James R. Miller
October 12, 1983
Page 4

FEE DETERMINATION

For fee determination purposes only we request that you consider this request for amendment as a supplement to our submittal dated September 20, 1983.

BALTIMORE GAS AND ELECTRIC COMPANY



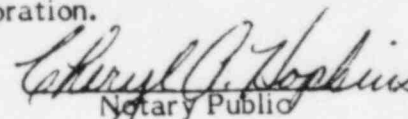
AEL/JRS/JET/sjb

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:

My Commission Expires


Notary Public
7/1/86

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