

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

ARTHUR I. LUNDVALL. JR. VICE PRESIDENT SUPPLY

February 24, 1983

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

ATTENTION: Mr. Robert A. Clark, Chief Operating Reactors Branch #3

Division of Licensing

SUBJECT:

Calvert Clift: Nuclear Power Plant

Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318

Request for Amendment

REFERENCES: (a)

Regulatory Guide 1.52, "Design, Testing, and Maintenance Criteria for Post-Accident Engineered Safety Feature Atmosphere Clean-up System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants"

Regulatory Guide 1.140, "Design, Testing, and Maintenance Criteria for Normal Ventilation Exhaust System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants"

#### Gentlemen:

Baltimore Gas and Electric Company hereby requests an Amendment for Operating Licenses DPR-53 & 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 82-162)

Remove old page B 3/4 4-1 of the Technical Specifications and replace with the marked up page B 3/4 4-1 incorporating the change. The change is applicable to both Unit Nos. 1 and 2.

### DISCUSSION AND JUSTIFICATION

This change corrects what is believed to be a typographical error in the bases section of the Technical Specifications for the RCS Code Safety Valves. The valve capacity reflected in this change is consistent with the Updated Final Safety Analysis Report values and the NSSS supplier design specifications.

2303010528 830 DR ADOCK 05000

This change is administrative in nature and, as such, does not result in any reduction in the safety margin used in the bases for the Technical Specifications or the Updated Final Safety Analysis Report.

# CHANGE NO. 2 (BG&E FCR 82-75, Supplement 1)

Remove old page 3/4 6-26 of the Technical Specifications and replace with marked up page 3/4 6-26 incorporating the change. This change is applicable to both Unit Nos. 1 and 2.

## **DISCUSSION AND JUSTIFICATION**

This change to the surveillance requirements represents an administrative change only. The new type of hydrogen analyzer required by NUREG-0737 utilizes a different type of calibration gas to verify zero scale and full scale deflection of the instrument. The type of calibration gas is specified in the manufacturer supplied Technical Manual and thus does not require mentioning in the Technical Specifications surveillance requirements. The change does not change the periodicity or operability requirements of the hydrogen analyzer, therefore, the analyzer will be adequately verified to be operable by these checks. It has been determined that the safety margin used in the bases for the Technical Specifications and the Updated Final Safety Analysis Report will not be degraded by this change.

# CHANGE NO. 3 (BG&E FCR 82-33)

Revise Technical Specification 3/4 6.1.1 as shown on the attached marked page 3/4 6-1. The change is applicable to both Unit Nos. 1 and 2.

### DISCUSSION AND JUSTIFICATION

Checking of the containment equipment hatch will be performed on containment closeout prior to entering MODE 4. Operating experience has shown that hatch seal
degradation is not a problem at this plant, and in addition, has shown the equipment
hatch seal to represent a very small fraction of the total containment leakage. The
current 24-month leakage rate testing periodicity for the hatch is sufficient to detect
any increase in leakage should this occur. Administrative controls already exist,
including the containment integrity Technical Specification, to preclude unsealing of the
hatch after start-up has commenced. Therefore, it is unnecessary to recheck the hatch
once per month thereafter. Modification of this requirement would enhance the plant's
ALARA and Man-Rem Reduction Programs. Estimated man-rem dosage received by
checking the equipment hatch during operation at 100% power is 15-30 millirem per
person for each check.

Because the equipment hatch will be verified closed and sealed prior to entering MODE 4 on start-up, and whenever the equipment hatch is opened during a shutdown, the relaxation of the requirement to visually check the seal will not result in any reduction in the integrity of the containment. No reduction in the bases for the Updated Final Safety Analysis Report or the Technical Specification bases will result from this change, and as such it does not pose any additional threat to the health and safety of the public.

# CHANGE NO. 4 (BG&E FCR 82-132)

Change Technical Specification Surveillance Requirements 4.6.3.1, 4.6.6.1, 4.7.6.1, 4.7.7.1, and 4.9.12 Sections dealing with obtaining Charcoal Filter samples. This change is applicable to both Unit Nos. 1 & 2.

## **DISCUSSION AND JUSTIFICATION**

A recent Facility Change Request installed new NUCON Test Tray assemblies in place of standard adsorber trays in all charcoal filter banks of Units 1 and 2 and Common filter systems. Technical Specification Surveillance Requirements for filter systems currently do not specifically provide a method of obtaining samples from these test trays. Methods for obtaining samples from standard adsorber trays and from test canisters are currently addressed in the Technical Specifications. The attached marked-up pages of the affected Technical Specifications provide the method we intend to use to obtain samples.

Technical Specification Surveillance Requirements currently require an in-place test of HEPA Filters as well as Charcoal Filters after obtaining charcoal samples from adsorber trays. We would like to delete the in-place testing of HEPA's for this one case because neither reference (a) nor (b) require in-place testing of HEPA filters following samples of Charcoal Filters. Reference (a) and (b) only require in-place testing of HEPA filters after initial installation, at least once per 18 months, following painting, fire, or chemical release in any ventilation zone communicating with the system, and following complete or partial replacement of the HEPA filters. Continued HEPA filter testing, following adsorber sampling, produces needless man/rem exposure and is inconsistent with the basic goals of the ALARA program.

# CHANGE NO. 5 (BG&E FCR 82-131)

Change Technical Specification surveillance requirement 4.7.7.1.b(2) to indicate the correct system flow rate. This change is applicable to both Unit Nos. 1 & 2.

### DISCUSSION AND JUSTIFICATION

This change corrects a typographical error in the Technical Specifications. All of the other sections of Technical Specification 4.7.7.1 reflect the correct flow, only 4.7.7.1.b(2) is in error. This change is strictly administrative in nature and will result in no increased risk to the health and safety of the public.

# CHANGE NO. 6 (BG&E FCR 82-179)

Remove pages 3/4 7-13 and B3/4 7-3 of Unit Nos. 1 and 2 Technical Specifications and replace with revised marked-up pages 3/4 7-13 and B3/4 7-3, Attachment (1) to this transmittal.

#### DISCUSSION AND JUSTIFICATION

The minimum pressurization temperatures in this proposed change for the steam generators for Unit Nos. 1 and 2 are consistent with the Vendor Technical Manual (80°F and 90°F, respectively) and have been verified with the NSSS supplier. Plant administrative procedures require that the temperatures be higher than either of these values before pressurization can occur at > 200 psig. In addition, a review of plant operating history has verified that no pressurization of the steam generators has occurred with the temperature below 100°F. The RT<sub>NDT</sub> values given in the Technical Specification bases are true for the primary side, but the MPT values are higher for the secondary side of the steam generators. Therefore, the bases have been reworded to refer to secondary side limitations. This change does not result in any reduction in the bases used in the Updated Final Safety Analysis Report or the Technical Specifications.

# CHANGE NO. 7 (BG&E FCR 82-178)

Replace existing pages 6-13 of Unit Nos. 1 and 2 Technical Specifications with revised marked-up pages 6-13, Attachment (2) to this transmittal.

#### **DISCUSSION AND JUSTIFICATION**

This represents an administrative change requiring the licensee (BG&E) to establish a written procedure to reflect the requirements of NRC Generic Letter 82-12 concerning the limiting of overtime for staff personnel performing safety-related functions. This change is being submitted as requested by NRC Generic Letter 82-16.

This change is administrative in nature and does not pose any additional risk to public health and safety or reduction in the bases for the Updated Final Safety Analysis Report or Technical Specifications.

### CHANGE NO. 8 (BG&E FCR 83-007)

Remove old pages 3/4 3-41 and 42 of the Unit 1 and 2 Technical Specifications, and replace with the attached marked up pages 3/4 3-41 and 42, incorporating the change.

## **DISCUSSION AND JUSTIFICATION**

This change incorporates the newly installed containment wide range water level instruments into the Technical Specifications for Post Accident Monitoring Instrumentation. The installed instrumentation consists of two independent channels of level indication for each containment, with only one channel of instrumentation required for post-accident monitoring. The surveillance requirements for this new type of

instrumentation are consistent with the other post-accident monitoring systems, and will adequately insure the accuracy of the instrumentation will remain within design tolerances.

Because these new instruments provide additional instrumentation to assist in diagnosis of an accident condition, it has been determined that this change does not result in any reduction in the bases for the Updated Final Safety Analysis Report. Since the instrumentation is to be used for indication only, the change does not pose any risk of a condition not previously analyzed in the Updated Final Safety Analysis Report or any reduction in the bases for the Technical Specifications.

The change also administratively deletes a note which allowed the Unit 1 safety valve acoustic monitor to be out of service until June 1, 1981. The note has expired, and deleting it should preclude any possible misinterpretation.

CH/.NGE 1.O. 9 (BG&E FCR 82-174)

Revise page 3/4 8-1 with the attached page.

# **DISCUSSION AND JUSTIFICATION**

The diesel generator fuel oil storage system consists of two outdoor storage tanks (each with a 125,000 gallon capacity) which are redundant and independent as stated in the Updated Final Safety Analysis Report. To facilitate inspection of one tank, the fuel supply in both tanks will be reduced by approximately 75,000 gallons. Then the contents of one tank will be transferred to both the alternate fuel source and the other diesel fuel oil storage tank. This will ensure continued system redundancy by providing two separate sources of fuel for the emergency diesel generators.

In the Technical Specifications, the operability of each diesel generator 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 1). Therefore, if only one fuel oil 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-company fossil facilities has pointed out the necessity of periodic inspection of fuel oil storage tanks. A plan to perform inspections at Calvert Cliffs on daily, weekly, yearly, and 5-year intervals has been drafted and a similar plan has been instituted at our fossil stations. In general, the 5-year inspection should be a visual inspection of the entire tank and a statistical metallurgical sample of the tank bottom using ultrasonic depth meters. This cannot be done at present because of the restrictive nature of our Technical Specifications. To alleviate this situation a change to the existing Technical Specifica is must be implemented.

The proposed change requires that two redundant sources of diesel fuel cil 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 amount of time any tank can be out of service to sixty days every five years. Finally, it limits the time of year that a fuel oil tank can be drained to the months when hurricanes and tornados are relatively rare, thus limiting the possibility that adverse weather could disable a tank. This is documented in the report entitled, "North Atlantic Cyclones", published in 1980 by J. Polissier and M. Lawrence. This precaution is in spite of the fact that only two tornados have been spotted in Calvert County since 1950.

The plant site is located in a region which has experienced only minor infrequent earthquake activity. There have been no earthquakes of Intensity greater than VII on the Modified Met calli Scale since the late 18th century when the first report of earthquake activity in the general site area was recorded. Since then only fourteen earthquakes with an intensity of V or greater have been reported within 100 miles of the site. This data along with other information contained within the Final Safety Analysis Report demonstrates that the probability of an earthquake which could cause interruption of fuel to the diesels is very small. In addition, one of the normal fuel oil storage tanks would be on-line at all times and these are both Class I seismically qualified.

By adopting this Technical Specification change the integrity of the diesel fuel oil supply system can be maintained via periodic inspections thus helping to insure back-up power in case of a station blackout. This will aid in adequately protecting the health and safety of the public within the vicinity of the plant.

The change also administratively deletes a note which allowed the Unit 1 safety valve acoustic monitor to be out of service until June 1, 1981. The note has expired, and deleting it should preclude any possible misinterpretation.

# SAFETY COMMITTEE REVIEW

This proposed change to the Technical Specifications has been reviewed by our Plant Operations and Safety and Off-Site Safety Review Committees, and they have concluded that implementation of this change will not result in an undue risk to the health and safety of the public.

# FEE DETERMINATION

We have determined, pursuant to 10 CFR Part 170, Paragraph 170.22, that these Amendment requests consists of Class IV and Class I amendments for Calvert Cliffs Unit No. 1 & 2, respectively, and accordingly, we are including BG&E Check No. A110655 in the amount of \$12,700.00 to cover the fee for this request.

## **BALTIMORE GAS AND ELECTRIC COMPANY**

By:

Vice President - Supply

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:

cc: J. A. Biddison, Esquire

G. F. Trowbridge, Esquire

D. H. Jaffe, NRC

R. E. Architzel