



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

December 8, 1992

Docket Nos. 50-317  
and 50-318

Mr. Robert E. Denton  
Vice President - Nuclear Energy  
Baltimore Gas & Electric Company  
Calvert Cliffs Nuclear Power Plant  
1650 Calvert Cliffs Parkway  
Lusby, Maryland 20657-4702

Dear Mr. Denton:

SUBJECT: SUMMARY OF LICENSING ACTIONS COMPLETED DURING THE 1992  
REFUELING OUTAGE AND IMPLEMENTATION OF ACTIONS ASSOCIATED  
WITH TAC NOS. M69730, M81522, M82363, M79911, CALVERT CLIFFS  
NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2

By letter dated September 16, 1992, Baltimore Gas and Electric Company (BG&E) provided to the NRC staff a summary of the licensing actions implemented during the refueling outage which ended on August 16, 1992. A total of eight issues were discussed in this letter. The first issue, NRC Bulletin 90-01, Rosenmount Transmitters, will be addressed in a separate letter. A supplement to the Bulletin will be issued shortly. The remaining seven issues are discussed below.

Generic Letter 88-17, Calvert Cliffs Unit 1 (TAC No. M69730)

Generic Letter (GL) 88-17, Loss of Decay Heat Removal, requested programmatic enhancements which included nonhardware changes and hardware modifications. By letter dated May 28, 1991, the NRC staff confirmed that nonhardware changes had been implemented for Units 1 and 2 except for technical specification changes which were issued on September 11, 1991.

The September 16, 1992, Refueling Outage Summary indicates that all hardware-related modifications have been implemented for Unit 1. Accordingly, all actions associated with TAC No. M69730 for Calvert Cliffs Unit 1 have been implemented.

Modifications to correct Control Room Human Engineering Deficiencies, Calvert Cliffs Unit 1 (TAC No. M56110) and Unit 2 (TAC No. M56111)

The September 16, 1992, Refueling Outage Summary provides the status of the four remaining Unit 1 Human Engineering Deficiencies (HEDs) modifications as follows:

140030  
9212160298 921208  
PDR ADOCK 05000317  
P PDR

NRC FILE CENTER COPY

DEF 1/0



HED: Meters on plane B of panels 17, 18, and 20 will be rearranged and/or broken up by demarcation or spacing techniques to enhance functional grouping. Facility Change Request (FCR) 88-208.

Status: As discussed in a letter to the staff dated March 6, 1992, this FCR is cancelled. The electrical control panels will be replaced as the result of the installation of the new emergency diesel generators.

HED: All control room keylock switches not conforming to the standard position convention will be remounted. FCR 88-210.

Status: This HED has been downgraded from safety-related to nonsafety-related by BG&E and the FCR has been canceled. During a conference call between the NRC staff and licensee representatives on November 17, 1992, the cancellation of this FCR was discussed and the staff was satisfied with the justification. The licensee has verified that operators had not experienced any problems with control room keylock switches and that the key could not get jammed if inserted improperly in the lock. No further action is required.

HED: Control room lighting, which is provided during a loss of offsite AC, does not provide an illumination level of 10 foot-candles. The lighting will be enhanced for both the control room and the auxiliary shutdown panel (C43). FCR 88-218.

Status: As discussed in a letter to the staff dated July 6, 1990, this modification is scheduled to be implemented before the Unit 2 restart from the 1993 refueling outage.

HED: Operator(s) have specified the need to add auxiliary feedwater (AFW) pump suction pressure indication to the control room. This indication will be added to control room panels 1/2 C04. FCR 88-225.

Status: This FCR has been canceled by BG&E. During a conference call between the NRC staff and licensee representatives on November 17, 1992, the cancellation of this FCR was discussed with the staff. There is a low suction pressure alarm in the control room and additional indications are displayed such as valve line-up, pump discharge pressure, and condensate storage tank level. The licensee and its operations staff have determined that adequate information relating to the status of the AFW system is available. No further action is required.

Based on the above status, all HEDs identified during the Detailed Control Room Design Review will be dispositioned or implemented prior to the restart of Unit 2 from its spring 1993 refueling outage.



Consideration of ASME Code Repair of Pipe Flaw, Calvert Cliffs Unit 1 (TAC M81522)

Letter dated April 25, 1991, BG&E requested relief from the ASME Code requirements for the repair of a through-wall flaw on a Code Class 3 piping in the saltwater header system. By letter dated May 17, 1991, the NRC staff granted the relief and approved the non-Code repair until the next refueling outage at which time Code repair or replacement would be made. The September 16, 1992, Refueling Outage Summary indicates that the header was replaced with new pipe during the 1992 outage. Therefore, all actions associated with TAC No. M81522 for Calvert Cliffs Unit 1 have been implemented.

Technical Specification amendment to isolation valve surveillance requirement Unit 1 (TAC No. M82363)

December 22, 1991, safety injection tank isolation valve MOV-644 which had been closed to perform repairs on the safety injection system failed to close. The valve stem was found to be bent. Temporary corrective action consisted of welding the valve stem to the valve yoke which resulted in the valve remaining permanently opened. Verification of valve position as required by technical specifications was no longer needed until the valve could be repaired or replaced. On January 29, 1992, Amendment No. 167 added a footnote to exempt motor-operated valve MOV-644 from the surveillance requirement to verify open position.

September 16, 1992, Refueling Outage Summary indicates that MOV-644 was repaired during the 1992 refueling outage. The footnote added by Amendment 167 is no longer applicable. Therefore, all actions associated with TAC M82363 for Unit 1 have been implemented. The footnote will be removed by subsequent administrative amendment request and a new TAC number will be used to track the review.

Increase in auxiliary feedwater actuation delay time for Unit 1 (TAC No. M72075)

Amendment No. 149 and Amendment No. 130 for Units 1 and 2, respectively, reduced the auxiliary feedwater (AFW) actuation delay time from 54.5 seconds to 30 seconds. By letter dated October 9, 1991, BG&E informed the NRC staff of the implementation of this amendment had permitted modifications to Unit 2 steam admission system which resulted in substantial improvements in system reliability.

September 16, 1992, Refueling Outage Summary indicates that similar modifications to Unit 1 steam admission system had been implemented during the 1992 outage. Therefore, all actions associated with TAC No. M72075 for Unit 1 have been implemented.

HED: Meters on plane B of panels 17, 18, and 20 will be rearranged and/or broken up by demarcation or spacing techniques to enhance functional grouping. Facility Change Request (FCR) 88-208.

Status: As discussed in a letter to the staff dated March 6, 1992, this FCR is cancelled. The electrical control panels will be replaced as the result of the installation of the new emergency diesel generators.

HED: All control room keylock switches not conforming to the standard position convention will be remounted. FCR 88-210.

Status: This HED has been downgraded from safety-related to non-safety-related by BG&E and the FCR has been canceled. During a conference call between the NRC staff and licensee representatives on November 17, 1992, the cancellation of this FCR was discussed and the staff was satisfied with the justification. The licensee has verified that operators had not experienced any problems with control room keylock switches and that the key could not get jammed if inserted improperly in the lock. No further action is required.

HED: Control room lighting, which is provided during a loss of offsite AC, does not provide an illumination level of 10 foot-candles. The lighting will be enhanced for both the control room and the auxiliary shutdown panel (C43). FCR 88-218.

Status: As discussed in a letter to the staff dated July 6, 1990, this modification is scheduled to be implemented before the Unit 2 restart from the 1993 refueling outage.

HED: Operator(s) have specified the need to add auxiliary feedwater (AFW) pump suction pressure indication to the control room. This indication will be added to control room panels 1/2 C04. FCR 88-225.

Status: This FCR has been canceled by BG&E. During a conference call between the NRC staff and licensee representatives on November 17, 1992, the cancellation of this FCR was discussed with the staff. There is a low suction pressure alarm in the control room and additional indications are displayed such as valve line-up, pump discharge pressure, and condensate storage tank level. The licensee and its operations staff have determined that adequate information relating to the status of the AFW system is available. No further action is required.

Based on the above status, all HEDs identified during the Detailed Control Room Design Review will be dispositioned or implemented prior to the restart of Unit 2 from its spring 1993 refueling outage.

Reconsideration of ASME Code Repair of Pipe Flaw, Calvert Cliffs Unit 1 (TAC No. M81522)

By letter dated April 25, 1991, BG&E requested relief from the ASME Code requirements for the repair of a through-wall flaw on a Code Class 3 piping of the saltwater header system. By letter dated May 17, 1991, the NRC staff granted the relief and approved the non-Code repair until the next refueling outage at which time Code repair or replacement would be made. The September 16, 1992, Refueling Outage Summary indicates that the header was replaced with new pipe during the 1992 outage. Therefore, all actions associated with TAC No. M81522 for Calvert Cliffs Unit 1 have been implemented.

Technical Specification amendment to isolation valve surveillance requirement for Unit 1 (TAC No. M82363)

On December 22, 1991, safety injection tank isolation valve MOV-644 which had been closed to perform repairs on the safety injection system failed to reopen. The valve stem was found to be bent. Temporary corrective action consisted of welding the valve stem to the valve yoke which resulted in the valve remaining permanently opened. Verification of valve position as required by technical specifications was no longer needed until the valve could be repaired or replaced. On January 29, 1992, Amendment No. 167 added a footnote to exempt motor-operated valve MOV-644 from the surveillance requirement to verify open position.

The September 16, 1992, Refueling Outage Summary indicates that MOV-644 was repaired during the 1992 refueling outage. The footnote added by Amendment No. 167 is no longer applicable. Therefore, all actions associated with TAC No. M82363 for Unit 1 have been implemented. The footnote will be removed by a subsequent administrative amendment request and a new TAC number will be issued to track the review.

Increase in auxiliary feedwater actuation delay time for Unit 1 (TAC No. M72075)

Amendment No. 149 and Amendment No. 130 for Units 1 and 2, respectively, changed the auxiliary feedwater (AFW) actuation delay time from 54.5 seconds to 180 seconds. By letter dated October 9, 1991, BG&E informed the NRC staff that implementation of this amendment had permitted modifications to Unit 2 steam admission system which resulted in substantial improvements in system reliability.

The September 16, 1992, Refueling Outage Summary indicates that similar modifications to Unit 1 steam admission system had been implemented during the 1992 outage. Therefore, all actions associated with TAC No. M72075 for Unit 1 have been implemented.



December 8, 1992

Station Blackout modification status for Unit 1 (TAC No. M68525) and Unit 2 (TAC No. M68526)

The September 16, 1992, Refueling Outage Summary indicates that two of the SBO modifications BG&E has committed to perform on Unit 1 have been completed during the 1992 refueling outage. These modifications consist of providing DC-powered indication for some Unit 1 isolation valves and providing AC power (through the inverters) to the reactor vessel level monitoring system. The staff understands that the remaining Unit 1 modifications are the following: (1) open up portions of the control room drop ceiling and (2) add temperature indicating switches to the battery room.

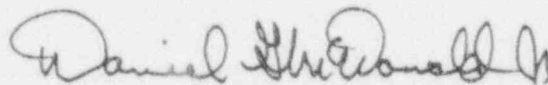
The Refueling Outage Summary also indicates that the remaining SBO modifications on Units 1 and 2, with the exception of the diesel generator addition, are scheduled to be performed before the end of Unit 2 refueling outage in 1993. The addition of new emergency diesel generators is scheduled for completion in 1996.

Containment pressure instrument tubing modifications on Unit 1 (TAC No. M79911) and Unit 2 (TAC No. M79912)

By letter dated December 30, 1991, the NRC staff provided an evaluation of the modifications to the containment pressure instrument tubing lines supports as proposed by BG&E in response to concerns raised by the staff. The staff concluded that the seismic analysis methodology used by BG&E in support of the modifications was unacceptable and provided options to resolve this issue. By letter dated February 3, 1992, BG&E proposed to reanalyze the tubing lines by using a methodology acceptable to the staff and to modify the tubing lines accordingly. The staff found the reanalysis, modifications, and modification schedule acceptable.

The September 16, 1992, Refueling Outage Summary indicates that Unit 1 modifications which could not be performed during power operation have been completed. Therefore, all actions associated with TAC No. M79911 have been implemented. Similar modifications are to be implemented on Unit 2 during the next refueling outage scheduled for the spring of 1993.

Sincerely,



Daniel G. McDonald, Senior Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

cc: See next page

Mr. Robert E. Denton  
Baltimore Gas & Electric Company

Calvert Cliffs Nuclear Power Plant  
Unit Nos. 1 and 2

cc:

Mr. Michael Moore, President  
Calvert County Board of  
Commissioners  
175 Main Street  
Prince Frederick, Maryland 20678

Mr. Joseph H. Walter  
Engineering Division  
Public Service Commission of  
Maryland  
American Building  
231 E. Baltimore Street  
Baltimore, Maryland 21202-3486

D. A. Brune, Esquire  
General Counsel  
Baltimore Gas and Electric Company  
P. O. Box 1475  
Baltimore, Maryland 21203

Kristen A. Burger, Esquire  
Maryland People's Counsel  
American Building, 9th Floor  
231 E. Baltimore Street  
Baltimore, Maryland 21202

Jay E. Silberg, Esquire  
Shaw, Pittman, Potts and Trowbridge  
2300 N Street, NW  
Washington, DC 20037

Patricia T. Birnie, Esquire  
Co-Director  
Maryland Safe Energy Coalition  
P. O. Box 33111  
Baltimore, Maryland 21218

Mr. G. L. Detter, Director, NRM  
Calvert Cliffs Nuclear Power Plant  
1650 Calvert Cliffs Parkway  
Lusby, Maryland 20657-47027

Resident Inspector  
c/o U.S. Nuclear Regulatory  
Commission  
P. O. Box 287  
St. Leonard, Maryland 20685

Mr. Richard I. McLean  
Administrator - Radioecology  
Department of Natural Resources  
580 Taylor Avenue  
Tawes State Office Building  
B3  
Annapolis, Maryland 21401

Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, Pennsylvania 19406



December 8, 1992

Station Blackout modification status for Unit 1 (TAC No. M68525) and Unit 2 (TAC No. M68526)

The September 16, 1992, Refueling Outage Summary indicates that two of the SBO modifications BG&E has committed to perform on Unit 1 have been completed during the 1992 refueling outage. These modifications consist of providing DC-powered indication for some Unit 1 isolation valves and providing AC power (through the inverters) to the reactor vessel level monitoring system. The staff understands that the remaining Unit 1 modifications are the following: (1) open up portions of the control room drop ceiling and (2) add temperature indicating switches to the battery room.

The Refueling Outage Summary also indicates that the remaining SBO modifications on Units 1 and 2, with the exception of the diesel generator addition, are scheduled to be performed before the end of Unit 2 refueling outage in 1993. The addition of new emergency diesel generators is scheduled for completion in 1996.

Containment pressure instrument tubing modifications on Unit 1 (TAC No. M79911) and Unit 2 (TAC No. M79912)

By letter dated December 30, 1991, the NRC staff provided an evaluation of the modifications to the containment pressure instrument tubing lines supports as proposed by BG&E in response to concerns raised by the staff. The staff concluded that the seismic analysis methodology used by BG&E in support of the modifications was unacceptable and provided options to resolve this issue. By letter dated February 3, 1992, BG&E proposed to reanalyze the tubing lines by using a methodology acceptable to the staff and to modify the tubing lines accordingly. The staff found the reanalysis, modifications, and modification schedule acceptable.

The September 16, 1992, Refueling Outage Summary indicates that Unit 1 modifications which could not be performed during power operation have been completed. Therefore, all actions associated with TAC No. M79911 have been implemented. Similar modifications are to be implemented on Unit 2 during the next refueling outage scheduled for the spring of 1993.

Sincerely,

Original signed by:

Daniel G. McDonald, Senior Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

cc: See next page

DISTRIBUTION:

Docket File

PDI-1 Reading

JCalvo

CVogan

COrsini

OGC

CCowgill, RGN-1

NRC & Local PDRs

SVarga

RACapra

DMcDonald

DOudinot

ACRS (10)

Plant File

OFFICE	PDI-1:L	PDI-1:PE	PDI-1:PM	PDI-1:D	
NAME	CVogan	DOudinot:avl	DMcDonald	RACapra	
DATE	12/7/92	12/8/92	12/10/92	12/8/92	1/1

OFFICIAL RECORD COPY

FILENAME: G:\CC1-2\CC169730.LTR