

ENCLOSURE (1)

BALTIMORE GAS AND ELECTRIC COMPANY
INSERVICE INSPECTION REPORT
FOR CALVERT CLIFFS UNIT 2

ASME BOILER AND PRESSURE VESSEL CODE
SECTION XI, FORM NIS-1

OWNER'S DATA REPORT FOR INSERVICE INSPECTION
(As Required by the Provisions of the ASME Code Rules)

1. Owner: Baltimore Gas and Electric Company
P. O. Box 1475
Baltimore, MD 21203
2. Plant: Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
Lusby, MD 20657
3. Plant Unit: Two (#2)
4. Owner Certification of Authorization: N/A
5. Commercial Service Date: April 1, 1977
6. National Board Number for Unit: 20912
7. Components Inspected:

COMPONENT OR APPURTENANCE	MANUFACTURER OR INSTALLER	MANUFACTURER OR INSTALLER SERIAL #	STATE OR PROVINCE #	NATIONAL BOARD NUMBER
Reactor Pressure Vessel	Combustion Engineering	CE-67108	14001NV	20912
Pressurizer	Combustion Engineering	CE-67603	14001NV	20916
Reactor Pressure Vessel Closure Head	Combustion Engineering	CE-67208	14001NV	20912
Steam Generator #21	Combustion Engineering	CE-67506	14001NV	20925
Steam Generator #22	Combustion Engineering	CE-67507	14001NV	20924
Reactor Coolant Pipe	Combustion Engineering	Contract No. 72467		
#21A Reactor Coolant Pump/Support	Byron Jackson/ Bechtel	SN-0441	14001NV	
#21B Reactor Coolant Pump/Support	Byron Jackson	SN-0442	14001NV	
#21A RCP Motor Flywheel	Westinghouse	SN-4S-77P108 (Motor)		
#21B RCP Motor Flywheel	Westinghouse	SN-4S-79P528 (Motor)		

7. Components Inspected: (con't.)

COMPONENT OR APPURTENANCE	MANUFACTURER OR INSTALLER	MANUFACTURER OR INSTALLER SERIAL #	STATE OR PROVINCE #	NATIONAL BOARD NUMBER
#22A RCP Motor Flywheel	Westinghouse	SN-1S-79P528 (Motor)		
#22B RCP Motor Flywheel	Westinghouse	SN-3S-79P528 (Motor)		
Safety Injection Piping/Supports	Bechtel			
Main Steam Piping/Supports	Bechtel			
Feedwater Piping	Bechtel			
Pressurizer Spray Piping/Supports	Bechtel			
Shutdown Cooling Piping/Supports	Bechtel			
Pressurizer Surge Supports	Bechtel			
Pressurizer Safety & Relief Piping/Supports	Bechtel			
Charging Piping	Bechtel			
Drain Piping / Supports	Bechtel			
Regenerative Heat Exchanger	Whitlock		56442NV	75252
Auxiliary Feedwater Piping/Supports	Bechtel			
Service Water Piping/Supports	Bechtel			
Component Cooling Water Piping/Supports	Bechtel			
Saltwater Piping/Supports	Bechtel			

NIS-1

8. Examination Dates: May 13, 1991 to June 14, 1993
9. Inspection Interval: April 1, 1987 to April 1, 1999
10. Abstract of Examinations: (Include list of exams and statements concerning status of work required for current interval)
(See Enclosures 2 & 3)

The examinations reported herein constitute the ninth such report of Inservice examination performed at Calvert Cliffs Unit 2, and the first report within the second period of the second interval of commercial operation. The examinations for the second interval as required by the Long-Term Examination Plan for Calvert Cliffs Unit 2, were performed in accordance with the 1983 Edition of ASME Code Section XI with Addenda through Summer, 1983. Hydrostatic and System Pressure Testing Procedures are available at the plant site for review.

11. Abstract of Conditions Noted:
(See Enclosure 3)

- a. The #21 and #22 Steam Generators were inspected by Eddy Current examination in April, 1993. The inspection consisted of a 100% full length examination of all the in-service tubes in both steam generators. There was evidence of continued minor degradation in both steam generators. As a result of the examination, 12 tubes in the #21 Steam Generator and 8 tubes in the #22 Steam Generator were removed from service.
- b. The remote visual examination of the Reactor Pressure Vessel (RPV) interior surfaces revealed gouges and rubbed area in the RPV Core Barrel alignment keys at 0° and 180°. Additionally, seven foreign material items were found inside the RPV on top of the Core Plate.
- c. Visual examinations of supports revealed 9 supports with construction/installation deficiencies; 8 supports with missing or loosened fasteners; 5 supports with improper spring settings; and 5 supports with other deficiencies.
- d. Six NIS-2's were not included with the August 8, 1991 Inservice Inspection Report for Calvert Cliffs Unit #2 due to administrative and clerical problems.
- e. During the MT examination of the Main Steam Piping welds, arc strike indications were recorded that exceeded the dimensions allowed by Section XI of the ASME Code.

12. Abstract of Corrective Measures Recommended and Taken:
(See Enclosures 2 & 3)

- a. Twelve tubes were plugged in #21 Steam Generator and 8 tubes were plugged in #22 Steam Generator.
- b. The rubbed area and gouges were noted in the previous examination, and resolved as non-relevant indications. All seven foreign material items were retrieved and removed.
- c. The supports were either accepted by evaluation in accordance with IWF-3122.4 or repaired to bring them into conformance with their original design.
- d. Five of the six outstanding NIS-2's are included in this submittal. The replacement plan associated with the remaining NIS-2 was cancelled because replacement item was not required.
- e. Supplemental UT examinations were performed on the arc strikes as allowed by Section XI of the ASME Code. No volumetric indications were obtained. Additionally, an Issue Report was written and the arc strikes were removed. The arc strikes were accepted in accordance with Table IWB-3514-1.

DATE: September 9, 1993

Page 5 of 6

NIS-1

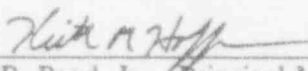
13. Names of Inspectors: R. W. Lawrence and D. L. Daullary

Employer of Inspectors: Factory Mutual Engineering Association
401 City Avenue, Suite #420
Bala Cynwyd, PA 19004

We certify that the Statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

DATE: SEPTEMBER 9, 1993

SIGNED:

 For, Baltimore Gas & Electric Company
R. B. Pond, Jr. - Principal Metallurgist
Materials Engineering & Analysis Unit

Certificate of Authorization No. N/A

Expiration Date N/A

DATE: September 9, 1993

NIS-1


Page 6 of 6

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Maryland and employed by Arkwright-Mutual Insurance Company of Norwood, Massachusetts have inspected the components described in this Owner's Data Report during the period May 13, 1989 to June 13, 1993, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Data Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

DATE: September 9, 1993


R. W. Lawrence
Factory Mutual Engineering Association

COMMISSION:

NB B226 ANI, MD 647
National Board, State,
Endorsements

ENCLOSURE (2)

BALTIMORE GAS AND ELECTRIC COMPANY
REPAIR AND REPLACEMENT REPORT
FOR CALVERT CLIFFS UNIT 2

ASME BOILER AND PRESSURE VESSEL CODE
SECTION XI, OWNER'S REPORT FOR
REPAIRS AND REPLACEMENTS, FORM NIS-2

CALVERT CLIFFS NUCLEAR POWER PLANT
SUMMARY OF NIS-2 REPORTS

UNIT 2

September 8, 1993

MO Number	Component
28804913	22B Reactor Coolant Pump Seal
28805480	34" EB-1-2005-H2
28805541	2-FW-133
28805624	22A Reactor Coolant Pump Seal
28907581	2-CV-4071, AFW Pp Strm Sup #22 S/G
200-135-197A	10"-GC-1-2003-R16 Support
200-135-197K	10"-GC-1-2003 Pipe
200-314-290A	Snubber 2-64-16
210-029-968B	Snubber 2-6A-09
29103385	Snubber 2-52-3
29103384	Snubber 2-52-5A
29103340	Snubber 2-64-47
29103339	Snubber 2-83-4A
201-213-002A	Snubber 2-52-10
29103311	Snubber 2-52-11
29103310	Snubber 2-52-20A
29103301	Snubber 2-63-12
29103300	Snubber 2-63-19
29103293	Snubber 2-63-11

NIS-2 Summary

MO Number	Component
208-287-554A	Snubber 2-61-4
29106930	Snubber 2-64-36
29107061	Snubber 2-52-38
29107211	Snubber 2-52-48
29205245	Redundant High Pressure Safety Injection System
29206305	Pressurizer Safety Relief Valve Piping
29201060	21 Charging Pump Suction Stabilizer
29201060	2" CC-7
29104748	2-CVC-517
29104598	4" GC3-2005
29107362	2-FO-6603
29005641	2# GC5-2008
29204061	2" EB1-2041/3 & 2-MOV-6603
29204062	2" EB1-2042/3 & 2-MOV-6604
29205479	16" DB1-2018 & 2-FE-1111
29205478	16" DB1-2019 & 2-FE-1121
29106427	2MOV4516
29106428	2MOV4517
29205593	22B Safety Injection Tank
29205595	21B Safety Injection Tank
29205597	21A Safety Injection Tank
29205619	22A Safety Injection Tank
29206751	2#CC4-2004 & CC13-2009-11
29108082	2" EB-01-2041 & 2-FO-6603
29206305	Pressurizer Steam Safety Relief Valve

NIS-2 Summary

MO Number	Component
29200509	#21 Safety Injection Refueling Water Tank
29105118	4" GC3-2005 Restraint #10
29205302	8" HC33-2005 Anchor A1
29205305	HC-33-2001-H4, HC-33-2001-R8
29103938	GC7-2017/2018 & 2-SI-449
29205304	8"HC33-2005 Anchor A2
29204003	2-CV-4071 AFW Pp Stm Sup #22 S/G
29205307	8" HC33-2005 Anchor H1
29206752	12" CC-4 & 13 & 12" GC-9
29205306	HC-33-2001-R17X & R37X & R38
29205516	2"EB14-2001
29205517	2"EB14-2002
29207173	2"EB14-2004
29205002	22B Safety Injection Header Check Valve
29200078	2CV3938
29206549	2" EB12-2024, 2MOV6611
29206549	2" EB12-2041
29206552	2" EB12-2030, 2MOV6612
29206552	2" EB12-2043
29103755	2" EB6-2016
29005281	21 Containment Spray Pump
29005283	22 Containment Spray Pump
29300689	Pressurizer Steam Safety Relief Valve
29201670	2MOV652
29104841	21 Pressurizer

NIS-2 Summary

MO Number	Component
29105118	21 Shutdown Cooling Heat Exchanger
29105118	22 Shutdown Cooling Heat Exchanger
29202943	2-MOV-617
29201730	2-CV-3939
29301868	Unit Two Reactor Vessel Head
29207294	Unit Two Reactor Vessel
29104834	21 Steam Generator
29104884	22 Steam Generator
29103570	21 Steam Generator
29103569	22 Steam Generator
29302414	2" CC7-2003 & 2-CVC-184
29302414	2" CC7-2003-PS-803
29302407	4" EB12-2029
29302407	4" EB12-2029
29302857	Boric Acid Pump Discharge
29302886	21 HPSI Piping Discharge Check Valve
28707432	2-MS-6604

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: September 8, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two
Rts. 2 & 4; Lusby, MD 20657

NISU Ref. No.: 28804913
P.O. No.: MWO No. 208-342-183A

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: 1

4. Identification of System: Startup No.: 64 System Name: Reactor Coolant

5. (a) Applicable Construction Code & Class: ASME Section III, 1983 Edition, Summer 1983 Addenda

(b) Applicable Installation Code & Class: ASME Section III, 1983 Edition, Summer 1983 Addenda

(c) Original Construction/Installation Code & Class: ASME Section III, 1965 Edition, 1967 Addenda Class A

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Remove existing Byron-Jackson seal and replace with Sulzer-Bingham seal in accordance with FCR 87-74.

8. Tests Conducted: Hydrostatic N/A
Pressure 2295 psi

Pneumatic N/A Nominal Operating Pressure XX
Test Temperature 532°F

9. Remarks/Code Cases: A VT-2 examination of the disturbed mechanical joint was performed during the system conditions listed in block 8 above. All construction & preservice inspections were satisfied by the suppliers. Forms N-2 attached.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician

Date: September 8, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-2-87 to 4-3-91, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Inspectors Signature

Commissions NB 8226 AWC MD 647

National Board, State, and Endorsements

Date: September 8, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Reactor Coolant Pump Seals	Replaced	Byron-Jackson	Pump Ser. No 0441/44	N/A	22B RCP Seal	1975	No
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 2234459-2 1C864	NB 1254	Seal Housing Heat No. 304L-8811	1989	Yes
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 2234475-3 1C864	NB1243	Thrust Ring Heat No. 304L-8808	1989	Yes
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 2256444-4 1C864	NB 1246	Thrust Ring Retainer Heat No. 304L-8808	1989	Yes
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 2234580-10 1C875	NB 1242	Seal Gland Assembly Heat No. 304L-8809	1989	Yes
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX	N/A	Capscrews P/N2234491	1989	No
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 1C866	N/A	Studs P/N 116	1989	No
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 1C864	N/A	Nuts P/N 117	1989	No

FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III, Division 1
Not To Exceed One Day's Production

Pg 2 of 1

2800 N.W. Front Avenue

1. Manufactured and certified by Gulzer Bingham Pumps Inc. Portland, OR 97210

(Name and address of certificate holder)

2. Manufactured for Baltimore Gas & Electric Baltimore, Maryland 21203

(Name and address of purchaser)

3. Location of installation Calvert Cliffs Nuclear Power Station

(Name and address)

4. Type D24609 Rev. B SA 351 CP3 70,000 N/A 1989

(drawing no.)

(mat. spec. no.)

(tensile strength)

(CRN)

(year built)

5. ASME Code, Section III 1983 Summer 1983 1 N/A

(edition)

(appendix)

(class)

(Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 1 only) Revision Date

(Ref.)

7. Remarks: Seal Housing ET# 304L-8811SBP Material Code 1088-1151, 088-20928. Nom. thickness (in.) 4.93" Min. design thickness (in.) 1.31" Dia. ID (ft. & in.) 1' 1.37" Length overall (ft. & in.) 2' 2.03"

9. When applicable, Certificate Holders' data reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board Number In Numerical Order
(1) <u>2224458-2</u>	<u>NB1254</u>	(26) <u> </u>	<u> </u>
(2) <u>10854</u>	<u> </u>	(27) <u> </u>	<u> </u>
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(25) <u> </u>	<u> </u>	(50) <u> </u>	<u> </u>

10. Design pressure 2500 psi Temp 550 °F Hydro test pressure 3125 at temp. °F 60
(when applicable)

*Supplemental information in form of data sketches or drawings may be used provided: (1) size is 8 1/2" x 11"; (2) information in items 1 and 2 on this data report is included on each sheet; (3) each sheet is numbered and number of sheets is recorded at top of this form; and (4) each additional sheet shall be signed by the Certificate holder and the ASME.

FORM N-2 (back)

CERTIFICATE OF DESIGN

Design specifications certified by R. P. Ash P. E. state Maryland Reg. no. 9198
Design report certified by W. R. Bak, Jr. P. E. state CA Reg. no. C-31430
(When applicable)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) _____
conform to the rules of construction of the ASME Code, Section III.

ASME Certificate of Authorization no. W1655 Expires Feb. 28, 1989

Date 1/23/89 Name Sulzer Bingham Pumps Inc. Signed Bob Faulkner
(NPT Certificate Holder) (Authorized Representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of Oregon and employed by Lumbermens Mutual Casualty Company
or Illinois have inspected these items described in this data report on 1/23/89 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 1/23/89 Signed A. J. Vance Commissions NA 7447
(Authorized Inspection) (Natl. Bd. (incl. endorsements) state or prov. and no.)

FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*As Required by the Provisions of the ASME Code, Section III, Division 1
Not To Exceed One Day's Production

Pg 1 of 1

1. Manufactured and certified by Sulzer Bingham Pumps Inc. Portland, OR 97210
(Name and address of certificate holder)

2. Manufactured for Baltimore Gas & Electric Baltimore, Maryland 21202
(Name and address of purchaser)

3. Location of installation Calvert Cliffs Nuclear Power Station
(Name and address)

4. Type 324812 No Rev. SA351 G3030 70.000 N/A 1988
(Drawing no.) (Part spec no.) (Tensile strength) (LPS) (Test date)

5. ASME Code, Section III 1983 Summer 1983 1 N/A
(Edition) (Addendum) (Class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div 2 only) Revision Date
(No.)

7. Remarks: THRUST RING RT# 3042-8808
BB Material Code # 088-1556

8. Nom. thickness (in.) 1.20" Min. design thickness (in.) 0.994" Dia. ID (ft. & in.) 1'4.995" Length overall (ft. & in.) 1.20"

9. When applicable, Certificate Holders' data reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board Number In Numerical Order
(1) <u>3235475- 2</u>	<u>NB1247</u>	(26) <u> </u>	<u> </u>
(2) <u>10864</u>	<u> </u>	(27) <u> </u>	<u> </u>
(3) <u> </u>	<u> </u>	(28) <u> </u>	<u> </u>
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10. Design pressure 3500 psi Temp 550 °F Hydro. test pressure 3125 at temp 550 °F
(when applicable)

*Supplemental information in form of data, sketches or drawings may be used provided (1) size is 8 1/2" x 11" (2) information in items 2 and 3 on this data report is included on each sheet (3) each sheet is numbered and number of sheets is recorded at top of this form and (4) each additional sheet shall be signed by the Certificate holder and the ASME.

FORM N-2 (back)

CERTIFICATE OF DESIGN

Design specifications certified by R. F. Ash P. E. state Maryland Reg. no. 9198
 Design report certified by W. R. Bax, Jr. P. E. state CA Reg. no. C-31430
(When applicable)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) _____
 conform to the rules of construction of the ASME Code, Section III.

ASME Certificate of Authorization no. N1655 Expires Feb. 28, 1989
 Date 12/23/88 Name Gulter Bingham Pumps Inc. Signed Bob Faulkner
(NPT Certificate holder) (authorized representative)

CERTIFICATE OF SHOP INSPECTION

The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of Oregon and employed by Lumbermens Mutual Casualty Company
 of Illinois have inspected these items described in this data report on 12/23/88 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.
 By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 12/23/88 Signed [Signature] Commissions NA-570
(Authorized Inspector) (N.B. 3d (incl. endorsement) state or prov. and no.)

NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III, Division 1
Not To Exceed One Day's Production

pg. 1 of 1

2800 N.W. Front Avenue

1. Manufactured and certified by Gilbert Bingham Pumps Inc. Portland, OR 97210
(name and address of certificate holder)

2. Manufactured for Baltimore Gas & Electric Baltimore, Maryland 21203
(name and address of purchaser)

3. Location of installation Calvert Cliffs Nuclear Power Station
(name and address)

4. Type A63258 No Rev. SA331 CR CF3 70,000 N/A 1983
(drawing no.) (part spec no.) (nominal strength) (CRN) (year built)

5. ASME Code, Section III: 1983 Summer 1983 1 N/A
(edition) (edition no.) (CRN) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 1 only) Revision Date
(NS)

7. Remarks: Thrust Ring Retainer HT-304L-8808
SBP Material Code # Q6R-1264

8. Nom. thickness (in.) 2.00 Min. design thickness (in.) 0.75 Dia. ID (ft. & in.) 11.75 Length overall (ft. & in.) 2.00

9. When applicable, Certificate Holders' data reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(1) 2255444-4	NB1046	(26)	
(2) 1C864		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 2500 psi Temp 550 °F Hydro test pressure 3125 at temp. of 50
(when applicable)

*Supplemental information in form of data, sketches or drawings may be used provided (1) serials 1 through 11, (2) information in items 2 and 3 on this data report is included on each sheet, (3) each sheet is numbered and number of sheets is recorded at top of the form, and (4) each additional sheet shall be signed by the Certificate Holder and the ASME.

FORM N-2 (back)

CERTIFICATE OF DESIGN

Design specifications certified by R. F. Ash P. E. state Maryland Reg. no. 9129
 Design report certified by W. R. Baky, Jr. P. E. state CA Reg. no. C-31430
(when applicable)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) _____
 conform to the rules of construction of the ASME Code, Section III.

ASME Certificate of Authorization no. N1555 Expires Feb. 28, 1989
 Date 12/23/88 Name Salzer Bingham Pumps, Inc. Signed Bob Faulkner
NAT Certificate Holder AUTHORIZED REPRESENTATIVE

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of Oregon and employed by Lumbermens Mutual Casualty Company
 of Illinois have inspected these items described in this data report on 12/23/88 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.
 By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 12/23/88 Signed CRD Commissions NBS470
AUTHORIZED INSPECTOR (NATL. Bd. (incl. endorsement) state or prov. and no.)

**FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III, Division 1
Not To Exceed One Day's Production

Page 1 of 1

1. Manufactured and certified by Sulzer Bingham Pumps Inc. Portland, OR 97210
(Name and address of certificate holder)

2. Manufactured for Baltimore Gas & Electric Baltimore, Maryland 21203
(Name and address of purchaser)

3. Location of installation Calvert Cliffs Nuclear Power Station
(Name and address)

4. Type 334805 Part 7 34351 OR C73 70,000 N/A 1986
(Drawing No.) (Part, Model, No.) (Design Strength) (CRN) (Year Made)

5. ASME Code Section III 1987 Summer 1983 1 N/A
(Edition) (Addendum) (Issue) (Code Case No.)

6. Replicate (in accordance with Const. Spec. Div. I only) Revision Date
(No.)

7. Remarks Seal Gland, Vapor RT # 3041-8800
See Material Code 3041-1506

8. Nom. thickness (in.) 3.50" Min. design thickness (in.) 3.46" Dia. (D in.) & (in.) 9.75" Length overall (ft. & in.) 7.2"
9. When applicable, Certificate holders' data reports are attached for each item of this report.

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(1) <u>334805-10</u>	<u>NB1242</u>	(26) <u> </u>	<u> </u>
(2) <u>10875</u>	<u> </u>	(27) <u> </u>	<u> </u>
(3) <u> </u>	<u> </u>	(28) <u> </u>	<u> </u>
(4) <u> </u>	<u> </u>	(29) <u> </u>	<u> </u>
(5) <u> </u>	<u> </u>	(30) <u> </u>	<u> </u>
(6) <u> </u>	<u> </u>	(31) <u> </u>	<u> </u>
(7) <u> </u>	<u> </u>	(32) <u> </u>	<u> </u>
(8) <u> </u>	<u> </u>	(33) <u> </u>	<u> </u>
(9) <u> </u>	<u> </u>	(34) <u> </u>	<u> </u>
(10) <u> </u>	<u> </u>	(35) <u> </u>	<u> </u>
(11) <u> </u>	<u> </u>	(36) <u> </u>	<u> </u>
(12) <u> </u>	<u> </u>	(37) <u> </u>	<u> </u>
(13) <u> </u>	<u> </u>	(38) <u> </u>	<u> </u>
(14) <u> </u>	<u> </u>	(39) <u> </u>	<u> </u>
(15) <u> </u>	<u> </u>	(40) <u> </u>	<u> </u>
(16) <u> </u>	<u> </u>	(41) <u> </u>	<u> </u>
(17) <u> </u>	<u> </u>	(42) <u> </u>	<u> </u>
(18) <u> </u>	<u> </u>	(43) <u> </u>	<u> </u>
(19) <u> </u>	<u> </u>	(44) <u> </u>	<u> </u>
(20) <u> </u>	<u> </u>	(45) <u> </u>	<u> </u>
(21) <u> </u>	<u> </u>	(46) <u> </u>	<u> </u>
(22) <u> </u>	<u> </u>	(47) <u> </u>	<u> </u>
(23) <u> </u>	<u> </u>	(48) <u> </u>	<u> </u>
(24) <u> </u>	<u> </u>	(49) <u> </u>	<u> </u>
(25) <u> </u>	<u> </u>	(50) <u> </u>	<u> </u>

10. Design pressure 2500 psi Temp 650 °F Hydro. test pressure 3125 at temp. °F 60
(When applicable)

*Supplemental information in form of data, sketches or drawings may be used provided (1) such is 8 1/2" x 11", (2) when entered in items 2 and 3 an original data report is attached on each sheet, (3) each sheet is numbered and number of sheets is recorded at top of this form, and (4) a test certificate sheet shall be signed by the Certificate Holder and the user.
(This form (E00040) may be obtained from the Order Desk, ASME, 345 E. 47th St., New York, N.Y. 10017 (5/82))

S.O. 1CB75 - CODE DATA REPORT
ITEM 424 - SEAL GLAND
CODE # 388 - 1506
PAGE 039

FORM N-2 (back)

CERTIFICATE OF DESIGN

Design specifications certified by R. F. Ash P. E. STATE Maryland Reg. no. 3108
 Design report certified by N. B. Bak, Jr. P. E. STATE CA Reg. no. C-31430
(When applicable)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) _____
 conform to the rules of construction of the ASME Code, Section III.

ASME Certificate of Authorization no. V1655 Expires Feb. 28, 1989

Date 12/23/88 Name Gilbert Bligham Pumps, Inc. Signed Bob Finkler
(Not Certificate Holder) (Authorized Representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of Oregon and employed by Summit Mutual Casualty Company,
 of Portland have inspected these items described in this data report on 12/23/88 and state that to the best of my knowledge and belief, the Certificate holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.
 By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 12/23/88 Signed [Signature] Commissions 1185470
(Authorized Inspector) (Not to include endorsements) State or Prov. and No.

S.O. 10975- CODE DATA REPORT
 ITEM 424- SEAL GLAND
 CODE # Q3B-1506
 PAGE 040

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., 5'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: September 3, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: 2 NISU Ref. No.:
Rts. 2 & 4; Lusby, MD 20657 P.O. No., MWO No. 28805480

3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A

4. Identification of System: Startup No.: 83 System Name: Main Steam ASME Sec. XI Class: 2

5. (a) Applicable Construction Code & Class: USAS B31.1, 1967 Edition
(b) Applicable Installation Code & Class: USAS B31.1, 1967 Edition
(c) Original Construction/Installation Code & Class: USAS B31.1, 1967 Edition

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Weld and install stiffener plates to the Main Steam Support.

8. Tests Conducted: Hydrostatic N/A Pressure psi Pneumatic N/A Test Temperature F
Nominal Operating Pressure N/A

9. Remarks/Code Cases: A VT-1 was performed prior to a MT exam. This NIS-2 was created from records other than the original work order due to the MO being misplaced and not being available; reference Non-Conformance Report 12786.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

William C. Holston

Owner or Owner's Designee, Title

W. C. Holston

Gen. Supv. Mechanical Maint.

Date September 3, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-28-88 to 5-2-88 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspectors Signature

Commissions NB 8226 ANI MD 647

National Board, State, and Endorsements

Date: September 3, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping Hanger	Replaced	Unknown	N/A	N/A	34" EB-1-2005-H2	1975	No
Structural	Replacement	Unknown	N/A	N/A	A-36 DRWG 13600-2421	1988	No

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: July 23, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657

Unit: 2

Reference No.: N/A

2a) P.O. No., MWO No. 28805541

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE

Authorization No.: N/A

Expiration Date: N/A

ASME Sec. XI Class: 2

4. Identification of System: Startup No.: 45 System Name: Feedwater

5. (a) Applicable Construction Code & Class: B31.1, 1967 Edition

(b) Applicable Installation Code & Class: B31.1, 1967 Edition

(c) Original Construction/Installation Code & Class: B31.1, 1967 Edition

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Disassembled valve, inspected internals. Reassembled and replace one stud and nut.

8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XX
Pressure 100 psi Test Temperature 44°F

9. Remarks/Code Cases:

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

10) Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: Robert W. Lawrence
Owner or Owner's Designee, Title

Date: 7-27, 1993

11) Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-24-89 to 4-8-91, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Robert W. Lawrence
Inspector's Signature

Commissions NB 8226 ANI MD 647

National Board, State, and Endorsements

FACTORY MUTUAL

ENGINEERING ASSOCIATION

Date: September 1, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 Edition, S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: September 7, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657

Unit: 2 NISU Ref. No.:
28805624
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: 1

4. Identification of System: Startup No.: 64 System Name: Reactor Coolant

5. (a) Applicable Construction Code & Class: ASME Section III, 1983 Edition, Summer 1983 Addenda w/S 1983 Add

(b) Applicable Installation Code & Class: ASME Section III, 1983 Edition, Summer 1983 Addenda w/S 1983 Add

(c) Original Construction/Installation Code & Class: ASME Section III, 1965 Edition, 1967 Addenda Class A

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Remove existing Byron-Jackson seal and replace with Sulzer-Bingham seal in accordance with FCR 87-74.

8. Tests Conducted: Hydrostatic N/A
Pressure 2295 psi

Pneumatic N/A Nominal Operating Pressure XX
Test Temperature 332°F

9. Remarks/Code Cases: A VT-2 examination of the disturbed mechanical joint was performed during the system conditions listed in block 8 above. All construction & preservice inspections were satisfied by the suppliers. Forms N-2 attached.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI.
repair or replacement

Signed: [Signature]
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician Date: September 7, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-2-89 to 7-23-91, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature]
Inspector's Signature

Commissions NB 8226 AND MD 647

National Board, State, and Endorsements

Date: September 9, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Reactor Coolant Pump Seals	Replaced	Byron-Jackson	Pump Ser. No 0441/44	N/A	22B RCP Seal A	1975	No
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 2234459-3 1C865	NB 1255	Seal Housing Heat No. 304L-5814	1989	Yes
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 2234475-1 1C865	NB1244	Thrust Ring Heat No. 304L-8808	1989	Yes
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 2256444-1 1C865	NB 124	Thrust Ring Retainer Heat No. 304L-8808	1989	Yes
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 2234580-3 1C873	NB 1240	Seal Gland Heat No. 304L-8818	1989	Yes
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 15490-11SW8SW 1C865	TM 1005 thru TM 1024	3/4" Instrument Valve Heat No. 93866	1988	Yes
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX	N/A	Capscrews P/N2234491	1989	No
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 1C866	N/A	Studs P/N 116	1989	No
Reactor Coolant Pump Seals	Replacement	Sulzer-Bingham	PO#13645MX 1C864	N/A	Nuts P/N 117	1989	No

FORM N2 NOR NPT CERTIFICATE HOLDERS DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code Section III, Division 1
Not To Exceed One Day's Production

1. Manufactured and certified by Salter-Singer Pump Inc., Portland, OR 97210
2. Manufactured for Baltimore Gas & Light Co., Baltimore, MD 21201
3. Location of installation Salter-Singer Nuclear Power Station
4. Type 214000 125 2 SA 121 111 20,000 S/A 1989
5. ASME Code Section III (1981) Subpart C (1981) 1 S/A
6. Fabricated in accordance with Code Book (Div. 2 only) None Permitted Date
7. Remarks SPR Housing HTS 304L-RR14
SPR Material Code PWR-1442, DWP-1092

8. Part thickness in 1.315 in. Design thickness in 1.315 in. ID in 1.315 length overall in 1.315
9. When applicable, Certificate Holder's data reports are attached for each item of this report

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(1) 214000 125 2	SP 111	(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 2500 psi Temp 650 °F Hydro test pressure 3125 psi Stamp "E" 50

*Supplies material information in form of data, drawings or drawings, plans, or other documents (1) used in the design of the part and (2) used in the fabrication of the part. The data shall be in accordance with the ASME Code Book and the Code. The data shall be in accordance with the ASME Code Book and the Code. The data shall be in accordance with the ASME Code Book and the Code.

1 8185
114 SPR HOUSING CODE DATA REPORT
1088-1442
CR2

FORM N-1 (Rev. 1)

CERTIFICATE OF DESIGN

Design specifications certified by S. F. Cox P. E. state ND Reg. no. 9198
 Design report certified by N. B. Cox Jr. P. E. state CA Reg. no. C-31430

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) _____
 conform to the rules of construction of the ASME Code, Section III.
 ASME Certificate of Authorization no. 11653 C-20193 February 28, 1989
 Date 1/23/89 Name Valzer Brothers Pump Inc. Signed Bob F. Finkler
ASME Certified Inspector

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state of _____
 and employed by UNDERRENS TRUSS CASUALTY COMPANY
 of Illinois have inspected these items described in this data report on 1/23/89 and state that to the
 best of my knowledge and belief the Certificate Holder has fabricated these parts or appliances in accordance with the ASME Code,
 Section III. Each part listed has been authorized for signing on the S. F. shown above.
 By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment
 described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or
 property damage or loss of any kind arising from or connected with this inspection.
 Date 1/23/89 Signed N. B. Cox Jr. Commission NA 7447
ASME Certified Inspector

SD 1 C 865
 ITEM 114 SEAL HOUSING CODE DATA REPORT
 DRAWING Q18-1442
 PAGE C23

FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III, Division 1
Not To Exceed One Day's Production

Page 1 of 1

1. Manufactured and certified by SWISS BROS. PUMPS, INC. Portland, OR 97210
2. Manufactured for BALTIMORE GAS & ELECTRIC BALTIMORE, MARYLAND 21201
3. Location of installation WATERS GLENN NUCLEAR POWER PLANT
4. Type THRUST RING 122 122 N/A 122
5. ASME Code Section III 122 122 122 N/A
6. Fabricated in accordance with Code Spec. Div. 1, Part 122 122 122 122
7. Remarks THRUST RING 122 122-122
122 Material Code 1 122-122

8. Nom. thickness (in.) 1.20 Min. design thickness (in.) 0.994 Dia. (in.) 1.20 Length overall (in.) 1.20
9. When applicable, Certificate Holders' data reports are attached for each item of this report.

Part of Appurtenance Serial Number	Nominal Serial No. in Numerical Order	Part of Appurtenance Serial Number	Nominal Serial Number in Numerical Order
(1) 122-122	122-122	(1) 122-122	122-122
(2) 122-122		(2) 122-122	
(3) 122-122		(3) 122-122	
(4) 122-122		(4) 122-122	
(5) 122-122		(5) 122-122	
(6) 122-122		(6) 122-122	
(7) 122-122		(7) 122-122	
(8) 122-122		(8) 122-122	
(9) 122-122		(9) 122-122	
(10) 122-122		(10) 122-122	
(11) 122-122		(11) 122-122	
(12) 122-122		(12) 122-122	
(13) 122-122		(13) 122-122	
(14) 122-122		(14) 122-122	
(15) 122-122		(15) 122-122	
(16) 122-122		(16) 122-122	
(17) 122-122		(17) 122-122	
(18) 122-122		(18) 122-122	
(19) 122-122		(19) 122-122	
(20) 122-122		(20) 122-122	
(21) 122-122		(21) 122-122	
(22) 122-122		(22) 122-122	
(23) 122-122		(23) 122-122	
(24) 122-122		(24) 122-122	
(25) 122-122		(25) 122-122	

10. Design pressure 122 psi Temp. 122 °F Hydro. test pressure 122 at temp. 122

*Supplementary information in form of test, inspection or otherwise may be added at the discretion of the user. This form is to be used for the purpose of the ASME Code, Section III, Division 1, Part 122. The user is responsible for the accuracy of the data entered on this form. The user is also responsible for the accuracy of the data entered on this form. The user is also responsible for the accuracy of the data entered on this form.

NO. 122-122
ITEM 122 THRUST RING CODE DATA REPORT
CODE # 122-122 SN 1
PAGE 122

FORM N-2 (Back)

CERTIFICATE OF DESIGN	
Design specifications certified by <u>R. F. Ash</u>	P. E. State <u>MARYLAND</u> Reg. No. <u>9198</u>
Design report certified by <u>W. H. Rex, Jr.</u>	P. E. State <u>TX</u> Reg. No. <u>0-11430</u>
CERTIFICATE OF SHOP COMPLIANCE	
We certify that the statements made in this report are correct and that this vessel conforms to the rules of construction of the ASME Code, Section III.	
ASME Certificate of Authorization No. <u>W1673</u>	Expires <u>Feb. 18, 1989</u>
Date <u>12/23/88</u> Name <u>Gulster Shipyard, Pomeroy, Inc.</u>	Signed <u>Bob Faulkner</u>
CERTIFICATE OF SHOP INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of <u>Illinois</u> , and employed by <u>Corbett's Mutual Casualty Company</u> , have inspected these items described in this data report on <u>12/23/88</u> and state that to the best of my knowledge and belief, the Certificate Holder has indicated those parts of assemblies in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the data report above. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.	
Date <u>12/23/88</u> Signed <u>[Signature]</u>	Commission <u>1465720</u>

S.O. 1C865
 ITEM 122 THRUST RING CODE DATA REPORT
 CODE # Q18-1365 SN 1
 PAGE 127

Page 1 of 1

1 Nom thickness in: 2.00" Min design thickness in: 0.75" O/e ID in in: 13.75" Length overall in: 2.00"
2 When applicable Certificate numbers data reports are attached for each item of this report

Part or Appendage Serial Number	National Board No. in Numerical Order	Part or Appendage Serial Number	National Board Number in Numerical Order
(1) 7756444-1	NR1247	(28)	
(2) 4681-5		(27)	
(3)		(26)	
(4)		(25)	
(5)		(20)	
(6)		(21)	
(7)		(22)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10 Design pressure 1500 psi Temp 680 °F Hydro test pressure 2125 psi at temp 680 °F

15/03/21

S.O. 1C865 --
ITEM: 125 THRUST RING RET. CODE DATA READ:
CODE # Q88-1364 SN-1
PAGE 221

FORM N-2 (Back)

CERTIFICATE OF DESIGN			
Design specifications certified by	<u>R. F. Ash</u>	P. E. state	<u>MARYLAND</u> Reg. No. <u>9188</u>
Design report certified by	<u>W. P. Ray, Jr.</u>	P. E. state	<u>GA</u> Reg. No. <u>C-31430</u>
CERTIFICATE OF SHOP COMPLIANCE			
We certify that the statements made in this report are correct and that they conform to the rules of construction of the ASME Code, Section III.			
ASME Certificate of Authorization no.	<u>W1635</u>	Expires	<u>FEB. 28, 1989</u>
Date	<u>12/23/88</u>	Name	<u>Walter Richard Purdie, Jr.</u>
		Signed	<u>Bob Fairhead</u>
CERTIFICATE OF SHOP INSPECTION			
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of <u>ILLINOIS</u> and employed by <u>Submarine Mutual Casualty Company</u> have inspected these items described in this date report on <u>12/23/88</u> and state that to the best of my knowledge and belief, the Certificate holder has indicated these parts or assemblies in accordance with the ASME Code, Section III. Each item listed has been authorized for stamping on the date shown above.			
By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this date report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.			
Date	<u>12/23/88</u>	Signed	<u>[Signature]</u>
		Commission	<u>185470</u>

S.O. LC 865
 ITEM 125 THRUST RING RET. CODE DATA REPORT
 CODE # Q18-1364 SN-1
 PAGE 135

25x10

**FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***

As Required by the Provisions of the ASME Code, Section III, Division 1
Not To Exceed One Day's Production

Pg. 1 of 1

1. Manufactured and certified by Sulzer Bingham Pumps Inc. Portland, OR 97210
(Name and address of certificate holder)

2. Manufactured for Baltimore Gas & Electric Baltimore, Maryland 21203
(Name and address of purchaser)

3. Location of installation Calvert Cliffs Nuclear Power Station
(Name and address)

4. Type D24605 Rev. F SA351 GR CP3 70,000 N/A 1988
(Drawing No. (Part, Code, No.) (Design strength) (CRN) (Year built)

5. ASME Code, Section III 1983 Summer 1983 1 N/A
(Edition) (Addendum) (Version) (Code Case No.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) _____ Revision _____ Date _____
(No.)

7. Remarks Seal Gland, Vapor RT #304L-R818
SBP Material Code #088-1505

8. Nom. thickness (in.) 3.50" Min. design thickness (in.) 0.46" Dia. (ft. & in.) 8.75" Length overall (ft. & in.) 7.27"

9. When applicable, Certificate holders' data reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(1) <u>2236880-1</u>	<u>NR1240</u>	(26) _____	
(2) <u>1CB73</u>		(27) _____	
(3) _____		(28) _____	
(4) _____		(29) _____	
(5) _____		(30) _____	
(6) _____		(31) _____	
(7) _____		(32) _____	
(8) _____		(33) _____	
(9) _____		(34) _____	
(10) _____		(35) _____	
(11) _____		(36) _____	
(12) _____		(37) _____	
(13) _____		(38) _____	
(14) _____		(39) _____	
(15) _____		(40) _____	
(16) _____		(41) _____	
(17) _____		(42) _____	
(18) _____		(43) _____	
(19) _____		(44) _____	
(20) _____		(45) _____	
(21) _____		(46) _____	
(22) _____		(47) _____	
(23) _____		(48) _____	
(24) _____		(49) _____	
(25) _____		(50) _____	

10. Design pressure 2500 psi Temp. 650 °F. Hydro. test pressure 3125 at temp. °F. 60
(When applicable)

*Submittal requirements in form of tests, drawings or drawings may be used provided (1) and (2) information in items 2 and 3 on this data report is included on each sheet, (3) each sheet is numbered and number of sheets is recorded at top of this form, and (4) each additional sheet shall be signed by the Certificate Holder and the ASME. The term (2000-40) may be obtained from the Order Desk, ASME, 345 E. 47th St., New York, N.Y. 10017 (6/82)

S.O. 1CB73 - CODE DATA REPORT
ITEM 424 - SEAL GLAND
CODE # 088-1505
PAGE 039

FORM N-2 (back)

CERTIFICATE OF DESIGN

Design specifications certified by R. F. Ash P. E. state Maryland Reg. no. 9198
 Design report certified by W. B. Bak, Jr. P. E. state CA Reg. no. C-31430
(When applicable)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) _____
 conform to the rules of construction of the ASME Code, Section III.

ASME Certificate of Authorization no. NI655 Expires Feb. 28, 1989
 Date 12/23/88 Name Bulzer Bingham Pumps Inc. Signed Bob Faulkner
(ASME Certificate Holder) (Authorized Representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of Oregon and employed by Lumbermens Mutual Casualty Company of Illinois have inspected these items described in this data report on 12/23/88 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appendances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.
 By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 12/23/88 Signed [Signature] Commissions 11A5470
(Authorized Inspection) (Not to be used: appendments: state or prov. and no.)

S.O. 10873 - CODE DATA REPORT
 ITEM 424 - SEAL GLAND
 CODE # Q88-1505
 PAGE 040

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
 Date: September 2, 1993
 Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO
Rts. 2 & 4; Lusby, MD 20657
 NISU Ref. No.: 89-2-021
28907581
 P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657
 Type Code Symbol Stamp: NONE
 Authorization No. N/A
 Expiration Date: N/A
 ASME Sec. XI Class: Two/MC

4. Identification of System: Startup No.: 083 System Name: Main Steam Sys

5. (a) Applicable Construction Code & Class: ASME Sect III 1977 Ed. thru Winter 79 Add. Class2
 (b) Applicable Installation Code & Class: ASME Sect III 1977 Ed. thru Winter 79 Add. Class2
 (c) Original Construction/Installation Code & Class: ASME Sect III 1977 Ed. thru Winter 79 Add. Class2

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Disassemble and Inspect 2-CV-4071 for preventive maintenance.

8. Tests Conducted: Hydrostatic N/A Pressure 810psi Pneumatic N/A Test Temperature 520°F Nominal Operating Pressure N/A

9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed joints were performed during the plant conditions listed in block 8 above. This NIS-2 was created from records other than the original work order due to the MO being misplaced and not being available; reference Non-Conformance Report 12786.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

William C. Holston
 Owner or Owner's Designee, Title

W.C. Holston
 Gen. Sup. Mechanical Maint. Date September 2, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-5-89 to 4-3-91, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
 Inspectors Signature

Commissions NB 3226 ANI MD 647

National Board, State, and Endorsements

Date: September 3, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Fisher Controls	#8252436	N/A	2-CV-4071, AFW Pp Stm Sup #22 S/G	1980	Y
Valve	Replacement	Fisher Controls	PO #85636-GX	N/A	Plug/Stem Assembly	1987	Y
Valve	Replacement	Fisher Controls	PO #85636-GX	N/A	Plug, Primary	1987	Y

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner BALTIMORE GAS & ELECTRIC Date 8-24-91
Name
RT's 2 & 4 LUSKY MD. 20657 Sheet 1 of 1
Address
2. Plant CALVERT CLIFFS NUCLEAR POWER PLANT Unit 2
Name
SAME AS ABOVE Address BGE MAINT. 200135197A & MO#
Repair Organization P.O. No., Job No., etc.
3. Work Performed by CCNPP MAINT. Type Code Symbol Stamp N/A
Name
SAME AS ABOVE Address Authorization No. N/A
Expiration Date N/A
4. Identification of System S/U 52 SAFETY INJECTION
5. (a) Applicable Construction Code B31.7 19 69 Edition, Addenda, Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 83
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
<u>SUPPORT</u> <u>10" - GC-1-2003-R16</u>	<u>GREENWELL</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>C1972</u>	<u>REPLACED</u>	<u>N</u>

7. Description of Work REPLACED DAMAGED SUPPORT
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks NONE

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPAIR/REPLACEMENT conforms to the rules of the ASME Code, Section XI, repair or replacement

Type Code Symbol Stamp NA

Certificate of Authorization No. NA Expiration Date NA

Signed COURT T. HERSHMAN Date 9 DEC 91 19 91
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MA and employed by ARRWRIGHT MUTUAL INS CO of NORWOOD MA have inspected the components described in this Owner's Report during the period 11-20-90 to 12-20-91, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY MUTUAL SYSTEM

William R. Rogers III Commissions NB7980 MD 952 NIBSIS
Inspector's Signature National Board, State, Province, and Endorsements

Date Dec. 20 19 91

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner BALTIMORE GAS & ELECTRIC CO. Date 2-21-92
Name
1650 CALVERT CLIFFS PARKWAY, LUSBY, MD 20657 Sheet 1 of 1
Address
2. Plant CALVERT CLIFFS NUCLEAR POWER PLANT Unit 2
Name
SAME AS #1 200135197K / 29005122
Address Repair Organization P.O. No., Job No., etc.
3. Work Performed by BGE CCNPPD MAINT. Type Code Symbol Stamp N/A
Name
SAME AS #1 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System SAFETY INJECTION 052
5. (a) Applicable Construction Code B31.7 19 69 Edition THRU '71 Addenda I II Code Case 11112
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 83 5'83 ADDENDA

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
PIPE 10"-GC-1-2003	N/A	N/A	N/A	PIPE 10"-GC-1-2003	1976	REPAIRED	N

7. Description of Work REMOVE ARC STRIKE
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ NOT REQUIRED
Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks ALL STRIKE REMOVED WITH FILE AND SANDPAPER
Applicable Manufacturer's Data Reports to be attached
NDE PERFORMED SAT. REF REPORTS # 91-021 & 91-010-CC

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPAIR conforms to the rules of the ASME Code, Section XI, repair or replacement

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Roger Cantrell / Senior Engineer Date 4-7 19 92
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MARYLAND and employed by ALLWRIGHT MUTUAL INSURANCE Co. of NORWOOD, MA have inspected the components described in this Owner's Report during the period 1-28-91 to 2-27-91, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, Province, and Endorsements

Date August 31, 1993

FACTORY MUTUAL
 ENGINEERING ASSOCIATION

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 5/1/92
Name
P. O. Box 1475; Baltimore, MD 21203
Address
2. Plant Calvert Cliffs Nuclear Power Plant Unit II
Name
Rts. 2 & 4; Lusby, MD 20657
Address
3. Work Performed by BGE Maint Dept Type Code Symbol Stamp N/A
Name
SAME AS #2 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System Startup No. 9-28-92 Name: Chemical & Volume Control System, Reactor coolant
5. (a) Applicable Construction Code ANSI B31.7 19 69 Edition, 1976 Addenda, — Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 83 (through Summer 83 Addenda)
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
SUPT #6 OLD 2" CG - 52003	UNK	N/A	N/A	FSK - MP - SIDE IT SUPT FC - INVALVE # 2 - 64-16	74	REPLACED	NO
HYDRAULIC SHUTTER 2-64-16	CREWELL CORP.	C-9102-01	—	VALVE 2K *	91	Replacement	—

7. Description of Work Remove support to allow installation of shutter. Replace when complete.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ VT-3 & VT-1
Other ☒ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

3. Remarks _____

Applicable Manufacturer's Data Reports to be attached _____

<p>CERTIFICATE OF COMPLIANCE <u>REPLACEMENT 4-23-92</u></p> <p>We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. <u>repair or replacement</u></p>	
Type Code Symbol Stamp _____	<u>N/A</u>
Certificate of Authorization No. _____	<u>N/A</u>
Signed _____	Date <u>28 SEP</u> , 19 <u>92</u>
Owner or Owner's Designee, Title	

<p>CERTIFICATE OF INSERVICE INSPECTION</p>	
<p>I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>MARYLAND</u> and employed by <u>ARKWRIGHT MUTUAL INSURANCE CO.</u> of <u>NORWOOD, MA</u> have inspected the components described in this Owner's Report during the period <u>10-16-89</u> to <u>6-12-91</u>, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.</p>	
<p>By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.</p>	
<p><u>Robert W. Lawrence</u> Inspector's Signature</p>	<p>Commissions <u>NB 3226 AWT MD 647</u> National Board, State, Province, and Endorsements</p>
<p>Date <u>August 31, 1993</u></p>	

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 1-29-91
Name
P.O. Box: 1475 Baltimore, MD 21203 Sheet 1 of 1
Address
2. Plant Calvert Cliffs Nuclear Power Plant Unit 2
Name
RT 2-A Lusby, MD 20657 Max 201-029-9688
Address Repair Organization P.O. No., Job No., etc.
3. Work Performed by BGE Type Code Symbol Stamp None
Name
P.O. Box: 1475 Baltimore, MD 21203 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System Reactor Cooling
5. (a) Applicable Construction Code B31.7 19 69 Edition, 69-71 Addenda, 1/6 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 83 583 addenda.
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
HYDRAULIC SNUBBER							
2-6A-09	GRINWELL CORP.	CG-11-2001-232	N/A	SK-2-19128	1975	REPAIRED	UC

7. Description of Work CUT OUT OLD WELD, RAISE THE VERT. MEMBER $\approx 1/2$ ", REWELD PER DCW # 136002824-1001

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks _____
 Applicable Manufacturer's Data Reports to be attached _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Repair conforms to the rules of the ASME Code, Section XI, repair or replacement

Type Code Symbol Stamp None

Certificate of Authorization No. None Expiration Date _____

Signed Raymond Cantrell / Senior Engineer Date 11-26 19 91
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MA and employed by Arkwright Mutual Ins Co of Worcester MA have inspected the components described in this Owner's Report during the period 2-1-91 to 6-18-91 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

M. J. Cantrell Arkwright Mutual Ins Co
 Inspector's Signature Commissions MA 3-1-84 NIS 613 and 531
 National Board, State, Province, and Endorsements

Date 12-10 19 91

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 12-3-91
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
2. Plant Calvert Cliffs Nuclear Power Plant Sheet 1 of
Name
Rt 2-4 Lusby, MD 20657 Unit 2
Address MD# 29103335, 201-211-8974
Repair Organization P.O. No., Job No., etc.
3. Work Performed by Baltimore Gas & Electric Co. Type Code Symbol Stamp None
Name Authorization No. N/A
P.O.Box: 1475 Baltimore, MD 21203 Expiration Date N/A
Address
4. Identification of System Safety Injection System
B31.1 67 Thru 72
B31.7 69 Thru 71 Addenda N/A Code Case
 5. (a) Applicable Construction Code Edition: Addenda
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 S'93 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No. Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year Rebuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Hydraulic Snubber							
<u>2-52-3</u>	<u>Grinnell Co.</u>	<u>73359668</u> <u>422</u>	<u>N/A</u>	<u>77808-1-S</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>PREVIOUS</u> <u>2-36-4</u>	<u>Grinnell Co.</u>	<u>74400328</u>	<u>N/A</u>	<u>102328-1-S</u>	<u>90</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic R & R Plant For Hydraulic Snubber PM Program at CCNPP
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Other ☐ Pressure psi Test Temp. °F
N/A

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks NA

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this _____ conforms to the rules of the ASME Code, Section XI, _____ repair or replacement

Type Code Symbol Stamp NA

Certificate of Authorization No. NA

Expiration Date _____

Signed COURT Y. HERSHELMAN
Owner or Owner's Designee, Title

Date 29 JAN 19 92

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD and employed by ARKWRIGHT MUTUAL INS CO. of NORWOOD MA have inspected the components described in this Owner's Report during the period 9-8-91 to 9-2-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

William R. Rogers II
Inspector's Signature

Commissions NB7980 MD952 NIBS IS
National Board, State, Province, and Endorsements

Date SEPT. 2 19 92

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 12-4-91
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
Sheet 1 of
2. Plant Calvert Cliffs Nuclear Power Plant Unit 2
Name
Rt 2-4 Lusby, MD 20657
Address
MD# 29103384, 201-211-3934
Repair Organization P.O. No., Job No., etc.
3. Work Performed by Baltimore Gas & Electric Co. Type Code Symbol Stamp None
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
Authorization No. N/A
Expiration Date N/A
4. Identification of System Safety Injection System
B31.1 67 Thru 72
5. (a) Applicable Construction Code B31.7 1969 Edition Thru 71 Addenda N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 S'83 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No. Serial No.	National Board No.	Other Identification Valve Bk. S.N. #	Year Rebuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
<u>2-52-5A</u>	<u>Grinnell Co.</u>	<u>72237426-7</u>	<u>N/A</u>	<u>6074-2-4</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>2-52-5A</u>	<u>Grinnell Co.</u>	<u>91203758</u> <u>- 3</u>	<u>N/A</u>	<u>16241-99</u>	<u>1991</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic R & R Plant For Hydraulic Snubber PM Program at CCNPP
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure psi Test Temp. °F
N/A

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks NA

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp None

Certificate of Authorization No. None

Expiration Date

Signed CORR Y. HERGENHEIMER
Owner or Owner's Designee, Title

Date

29 JUN

19 92

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD and employed by ARKWRIGHT MUTUAL INS CO. of NORWOOD MA have inspected the components described in this Owner's Report during the period 9-4-91 to 9-2-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY MUTUAL SYSTEM

William R. Rogers
Inspector's Signature

Commissions NB 7980 MD 952 NIBSI
National Board, State, Province, and Endorsements

Date SEPT. 2 19 92

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co.
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
2. Plant Calvert Cliffs Nuclear Power Plant
Name
Rt 2-4 Lusby, MD 20657
Address
3. Work Performed by Baltimore Gas & Electric Co.
Name
P.O.Box: 1475 Baltimore, MD 21203
Address

Date 11/1/91
Sheet 1 of 1
Unit 2
MD# 89105340-201-212-953-A
Repair Organization P.O. No., Job No., etc.
Type Code Symbol Stamp None
Authorization No. N/A
Expiration Date N/A

4. Identification of System Refrigerant Coil
B31.1 67 Thru 72
5. (a) Applicable Construction Code B31.7 1969 Edition Thru 71 Addenda N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 S'83 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No. Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year Rebuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
<u>2-64-47</u> Hydraulic Snubber	<u>Grinnell Co.</u>	<u>73296237-7</u>	<u>N/A</u>	<u>6776B-5-A</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>2-64-47</u>	<u>Grinnell Co.</u>	<u>76309571</u>	<u>N/A</u>	<u>77244537-112</u>	<u>91</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic R & R Plant For Hydraulic Snubber PM Program at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F N/A

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks _____
 Applicable Manufacturer's Data Reports to be attached _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp None

Certificate of Authorization No. None Expiration Date _____

Signed Robert C. Hall / Division Engineer Date 4-20 19 92
 Owner or Owner's Designee Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD and employed by ARKWICH MUTUAL INS of NORWOOD MA have inspected the components described in this Owner's Report during the period 9-4-91 to 8-10-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY MUTUAL SYSTEM

William R. Rogers Commissions NB 7980 MD 952 NIBS IS
 Inspector's Signature National Board, State, Province, and Endorsements

Date 8-10 19 92

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co.
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
2. Plant Calvert Cliffs Nuclear Power Plant
Name
Rt 2-4 Lusby, MD 20657
Address
3. Work Performed by Baltimore Gas & Electric Co.
Name
P.O.Box: 1475 Baltimore, MD 21203
Address

Date 10-23-91
Sheet 1 of 1
Unit 2
MO# 29103339, 201-212-9548
Repair Organization P.D. No., Job No., etc.
Type Code Symbol Stamp None
Authorization No. N/A
Expiration Date N/A

4. Identification of System 33 Main Steam
B31.1 67 Thru 72
5. (a) Applicable Construction Code B31.7 1969 Edition Thru 71 Addenda N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 S'92 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No. Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year Rebuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Hydraulic Snubber							
<u>2-83-4A</u>	<u>Grinnell Co.</u>	<u>74440217-6</u>	<u>N/A</u>	<u>B045A5-8710</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>2-83-4A</u>	<u>Grinnell Co.</u>	<u>C-90-11-01</u>	<u>N/A</u>	<u>V-90-11-01</u>	<u>90</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic R & R Plant For Hydraulic Snubber PM Program at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks _____

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. FOR REPLACEMENT

Type Code Symbol Stamp _____

None

Certificate of Authorization No. _____

None

Expiration Date _____

Signed _____

Owner or Owner's Designer Title

Roger Cottrell / Senior Engineer

Date _____

4-20-92

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD and employed by ARKWRIGHT MUTUAL INS Co of NORWOOD MA have inspected the components described in this Owner's Report during the period 9-4-91 to 8-10-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY Mutual System

William R. Bawter
Inspector's Signature

Commissions _____

NB 7980 MD 952 NIBS II
National Board, State, Province, and Endorsements

Date _____

AUG. 10

1992

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 9-9-91
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
2. Plant Calvert Cliffs Nuclear Power Plant Sheet 1 of 1
Name
Rt 2-4 Lusby, MD 20657
Address
3. Work Performed by Baltimore Gas & Electric Co. Unit 2
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
Repair Organization P.O. No., Job No., etc.
4. Identification of System 52 Safety Injection
BSI.1 6" Thru 72
BSI.7 ✓ 1969 Edition Thru 71
Addenda N/A
Code Case
5. (a) Applicable Construction Code 1969 Edition Thru 71 Addenda N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No. Serial No.	National Board No.	Other Identification Valve B.L.K. S.N. #	Year Rebuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
2-52-10 Hydraulic Snubber	Grinnell Co	74401328-251	N/A	10464B	N/A	Replaced	No
2-52-10	Grinnell Co	73345358-43	N/A	8619-B-1-SP	91	Replacement	No

7. Description of Work Generic R & R Plant For Hydraulic Snubber PM Program at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

6. Remarks

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI, repair or replacement

Type Code Symbol Stamp

N/A

Certificate of Authorization No.

None

Expiration Date

Signed

Roger Cantrell / Senior Engineer
Owner or Owner's Designee, Title

Date

4-1

19

92

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD and employed by ARKWRIGHT MUTUAL INS Co of NEKWOOD, MD, have inspected the components described in this Owner's Report during the period 1-9-92 to 6-3-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY MUTUAL SYSTEM

William R. Poynter
Inspector's Signature

Commissions

NB 7980

MD 952

NIBS IS

National Board, State, Province, and Endorsements

Date

JUNE 3

19

92

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 9-16-91
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
 2. Plant Calvert Cliffs Nuclear Power Plant Sheet 1 of 1
Name
Rt 2-4 Lusby, MD 20657 Unit 2
Address MO# 29103311, 201213003A
 3. Work Performed by Baltimore Gas & Electric Co. Repair Organization P.O. No., Job No., etc.
Name Type Code Symbol Stamp None
P.O.Box: 1475 Baltimore, MD 21203 Authorization No. N/A
Address Expiration Date N/A
 4. Identification of System 52 Safety Injection
B31.1 68 Thru 72
 5. (a) Applicable Construction Code B31.7 1969 Edition Thru 71 Addenda N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 Addenda S'83 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Manufacturer Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year Rebuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
<u>2-52-11</u> Hydraulic Snubber	<u>Grinnell Co.</u>	<u>7334558-10</u>	<u>N/A</u>	<u>8868-6-1-SP</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>2-52-11</u>	<u>Grinnell Co.</u>	<u>7334558-10</u>	<u>N/A</u>	<u>78413-2-1-SP</u>	<u>91</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic R & R Plant For Hydraulic Snubber PM Program at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F N/A

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks _____

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp _____

None

Certificate of Authorization No. _____

None

Expiration Date _____

Signed _____

Owner or Owner's Designee, Title

Date _____

7-3

19

92

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MARYLAND and employed by ARKWRIGHT MUTUAL INSURANCE Co of NEWTON, MA have inspected the components described in this Owner's Report during the period 8-28-91 to 9-16-91, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY MUTUAL SYSTEM

Robert W. Lawrence
Inspector's Signature

Commissions _____

NB 3226 ANI

MD 647

National Board, State, Province, and Endorsements

Date _____

Oct 30, 1992

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 7-6-91
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
Sheet 1 of 1
2. Plant Calvert Cliffs Nuclear Power Plant Unit 2
Name
Rt 2-4 Lusby, MD 20657
Address
MO# 29103310, 201213005A
Repair Organization P.O. No., Job No., etc.
3. Work Performed by Baltimore Gas & Electric Co. Type Code Symbol Stamp None
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
Authorization No. N/A
Expiration Date N/A
4. Identification of System #22 Safety Injection
B31.1 67 Thru 72
B31.7 1969 Edition Thru 71 Addenda N/A
Code Case
5. (a) Applicable Construction Code B31.7 1969 Edition Thru 71 Addenda N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 S'83 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year Rebuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Hydraulic Snubber							
<u>2-52-20A</u>	<u>Grinnell Co.</u>	<u>74402376/10</u>	<u>N/A</u>	<u>10461-64-98</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>2-52-20A</u>	<u>Grinnell Co.</u>	<u>7804635943</u>	<u>N/A</u>	<u>2867-B-1-00</u> <u>1261-63-55</u>	<u>91</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic R & R Plant For Hydraulic Snubber PM Program at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 5 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks NA

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Refinement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp None

Certificate of Authorization No. None

Expiration Date

Signed CLAYTON HERSCHT
Owner or Owner's Designee, Title

Date

9 DEC

19 91

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD and employed by BECKWRIGHT MUTUAL INS CO of NORWOOD MA have inspected the components described in this Owner's Report during the period 1-9-91 to 12-19-91 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY MUTUAL SYSTEM

William R. Piquette
Inspector's Signature

Commissions

NB 7908 MD 952 NIBS IS
National Board, State, Province, and Endorsements

Date DEC 19 19 91

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co.
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
2. Plant Calvert Cliffs Nuclear Power Plant
Name
Rt 2-4 Lusby, MD 20657
Address
3. Work Performed by Baltimore Gas & Electric Co.
Name
P.O.Box: 1475 Baltimore, MD 21203
Address

Date 10-29-81
Sheet 1 of 1
Unit 2
MD# 29103301 / COI-213-0264
Repair Organization P.O. No., Job No., etc.
Type Code Symbol Stamp None
Authorization No. N/A
Expiration Date N/A

4. Identification of System 23 Steam Generator
5. (a) Applicable Construction Code ASME III 1965 Edition, W'67 Addenda N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 S'83 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No. Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year Rebuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Hydraulic Snubber							
2-63-12	Grinnell Co.	33156120	N/A	23-18 23-27	N/A	Replaced	No
2-63-12	Grinnell Co.	33156120-10	N/A	23-8 V8-1	91	Replacement	No

7. Description of Work Generic R & R plant for Steam Generator Hydraulic Snubber PM at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks _____

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp _____

None

Certificate of Authorization No. _____

None

Expiration Date _____

Signed _____

Ross Cantrell / Senior Engineer
Owner or Owner's Designee, Title

Date _____

4-20, 19 92

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD. and employed by ARKWRIGHT MUTUAL INS. Co. of NORWOOD MA. have inspected the components described in this Owner's Report during the period 9-11-91 to 8-10-92 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY MUTUAL SYSTEM

William R. Roemer
Inspector's Signature

Commissions _____

NB7980 MD952 NIBS IS
National Board, State, Province, and Endorsements

Date _____

AUG. 10

19 92

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 10-31-91
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
 2. Plant Calvert Cliffs Nuclear Power Plant Sheet 1 of 1
Name
Rt 2-4 Lusby, MD 20657 Unit 2
Address MD# 29103300 / 201-113-023A
Repair Organization P.O. No., Job No., etc.
 3. Work Performed by Baltimore Gas & Electric Co. Type Code Symbol Stamp None
Name Authorization No. N/A
P.O.Box: 1475 Baltimore, MD 21203 Expiration Date N/A
Address
 4. Identification of System 10-3 Steam Generator
 5. (a) Applicable Construction Code ASME III 1965 Edition W'67 Addenda N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 S'83 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No. Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year ReBuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Hydraulic Snubber							
<u>2-63-19</u>	<u>Grinnell Co.</u>	<u>33156120-46</u>	<u>N/A</u>	<u>VB-7</u> <u>VB-9</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>2-63-19</u>	<u>Grinnell Co.</u>	<u>33156120-9</u>	<u>N/A</u>	<u>V15-24</u> <u>VB-11</u>	<u>91</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic R & R plant for Steam Generator Hydraulic Snubber PM at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 8 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks _____
 Applicable Manufacturer's Data Reports to be attached _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT conforms to the rules of the ASME Code, Section XI.
repair or replacement

Type Code Symbol Stamp None

Certificate of Authorization No. None Expiration Date _____

Signed Roger P. Smith / Senior Engineer Date 4-10 19 92
Owner or Owner's Designee / Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD and employed by ARKWRIGHT MUTUAL INS. Co. of NORWOOD MA have inspected the components described in this Owner's Report during the period 9-4-91 to 9-3-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

William R. Rogers Commissions NB 7980 MD 952 NIBS II
Inspector's Signature National Board, State, Province, and Endorsements

Date SEP. 3 19 92

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co.
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
2. Plant Calvert Cliffs Nuclear Power Plant
Name
Rt 2-4 Lusby, MD 20657
Address
3. Work Performed by Baltimore Gas & Electric Co.
Name
P.O.Box: 1475 Baltimore, MD 21203
Address

Date 10-29-91
Sheet 1 of 1
Unit 2
MD# 24101243 / 701-213-0384
Repair Organization P.O. No., Job No., etc.
Type Code Symbol Stamp None
Authorization No. N/A
Expiration Date N/A

4. Identification of System C-3 Steam Generator
5. (a) Applicable Construction Code ASME III 1965 Edition, W-67 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 S-83 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year Rebuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Hydraulic Snubber							
<u>2-63-4</u>	<u>Grinnell Co.</u>	<u>33156120</u>	<u>N/A</u>	<u>VB-21</u> <u>VB-22</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>2-63-11</u>	<u>Grinnell Co.</u>	<u>331561204</u>	<u>N/A</u>	<u>VB-10</u> <u>VB-31</u>	<u>91</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic R & R plant for Steam Generator Hydraulic Snubber PM at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks _____

Applicable Manufacturer's Data Reports to be attached _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Redesign conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp _____

None

Certificate of Authorization No. _____

None

Expiration Date _____

Signed _____

Owner or Owner's Designee, Title

Date _____

4-10 19 92

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD and employed by ARKWRIGHT MUTUAL INS. Co. of NORWOOD MA have inspected the components described in this Owner's Report during the period 9-4-91 to 9-3-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY MUTUAL SYSTEM

William R. Rogers
Inspector's Signature

Commissions _____

NB7980 MD 952 NIBS II
National Board, State, Province, and Endorsements

Date _____

SEPT. 3

19 92

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Company Date 2-9-89
Name
Charles Center, P. O. Box 1475, Baltimore, MD 21203 Address
Sheet 1 of 1
2. Plant Calvert Cliffs Nuclear Power Plant Unit One
Name
Lusby, MD 20657 Address
MD # 208-287-554A
Repair Organization P.O. No., Job No., etc.
3. Work Performed by Baltimore Gas & Electric Co. Type Code Symbol Stamp None
Name
Charles Center, P.O. Box 1475, Baltimore, MD 21203 Address
Authorization No.
Expiration Date
4. Identification of System See Snubber System Description List (Attachment B)
Bechtel Spec. M-254 and M-255, Nuclear & Non-nuclear Piping & Support
5. (a) Applicable Construction Code ASME 1988 Edition, Section XI Addenda, None Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1988

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Manufacturer Serial No.	National Board No.	Other Identification Valve Block SN	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
<u>2-61-A</u>							
<u>1 1/2 x 5 Snubber</u>	<u>Grinnell</u>	<u>7535566-750</u>	<u>N/A</u>	<u>9126-B-1-SP</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>1 1/2 x 5 Snubber</u>	<u>Grinnell</u>	<u>75345358-79</u>	<u>N/A</u>	<u>8758-B-1-SP</u>	<u>89</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic Replacement Plan for Snubbers in CCNPP Preventive Maintenance Program
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☒ Pressure psi Test Temp. °F

See Attachment B and SNUB Traveler Form.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

2. Remarks _____
 Applicable Manufacturer's Data Reports to be attached _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT conforms to the rules of the ASME Code, Section XI repair or replacement

Type Code Symbol Stamp None
 Certificate of Authorization No. None Expiration Date N/A
 Signed Michael J. Gahan Date MAY 19 19 89
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD and employed by AEKWEIGHT MUTUAL INS CO of NORWOOD MA have inspected the components described in this Owner's Report during the period 3-22-88 to 2-11-89, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY MUTUAL SYSTEM

William R. Royle III Commissions NB7980 MD952 NIPSI
 Inspector's Signature National Board, State, Province, and Endorsements

Date FEB 29 19 91

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 11-4-81
Name
P.O.Box: 1475 Baltimore, MD 21203
Address

2. Plant Calvert Cliffs Nuclear Power Plant Sheet 1 of
Name
Rt 2-4 Lusby, MD 20657 Unit
Address MD# 29106930
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Baltimore Gas & Electric Co. Type Code Symbol Stamp None
Name Authorization No. N/A
P.O.Box: 1475 Baltimore, MD 21203 Expiration Date N/A
Address

4. Identification of System 64 Reactor Coolant
B31.1 67 Thru 72

5. (a) Applicable Construction Code B31.7 19 69 Edition, Thru 71 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 S'83 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Valve Block Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year ReBuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
<u>2-64-20 Hydraulic Snubber</u>	<u>Grinnell Co.</u>	<u>72237426-193</u>	<u>N/A</u>	<u>6964-2-A</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>2-64-26</u>	<u>Grinnell Co.</u>	<u>91203753-1</u>	<u>N/A</u>	<u>8-114x 2V 16241-46</u>	<u>91</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic R & R Plant for Minor Seal Leak (Hydraulic Snubber) at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Other ☐ Pressure psi Test Temp. °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks _____
 Applicable Manufacturer's Data Reports to be attached _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Redoement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp None

Certificate of Authorization No. None Expiration Date _____

Signed Roger Cantrell / Senior Engineer Date 4-9 19 92
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MARYLAND and employed by ARKWRIGHT MUTUAL INSURANCE CO of NORWOOD, MA have inspected the components described in this Owner's Report during the period 10-25-92 to 11-4-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert W. Lawrence Commissions NBB226 ANI MD 647
 Inspector's Signature National Board, State, Province, and Endorsements

Date Nov. 3 19 92

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 11-6-91
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
2. Plant Calvert Cliffs Nuclear Power Plant Unit 2
Name
Rt 2-4 Lusby, MD 20657
Address
MD# 29107061
Repair Organization P.O. No., Job No., etc.
3. Work Performed by Baltimore Gas & Electric Co. Type Code Symbol Stamp None
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
Authorization No. N/A
Expiration Date N/A
4. Identification of System 52 Safety Injection
B31.1 67 Thru 72
5. (a) Applicable Construction Code B31.7 19 69 Edition, Thru 71 Addenda N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 83 S'83 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year Rebuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Hydraulic Snubber							
<u>2-52-38</u>	Grinnell Co.	<u>72237426-185</u>	N/A	<u>6157-2-A</u>	N/A	Replaced	No
<u>2-52-38</u>	Grinnell Co.	<u>91203758-8</u>	N/A	<u>B-162-624156</u>	<u>91</u>	Replacement	No

7. Description of Work Generic R & R Plant for Minor Seal Leak (Hydraulic Snubber) at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks _____

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the report are correct and this <u>Replacement</u> conforms to the rules of the ASME Code, Section XI, <u>repair or replacement</u>	
Type Code Symbol Stamp _____	<u>None</u>
Certificate of Authorization No. _____	Expiration Date _____
Signed <u>Roger Cantrell / Senior Engineer</u>	Date <u>4-20-92</u>
Owner or Owner's Designee, Title _____	

CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>MD</u> and employed by <u>ARKWRIGHT MUTUAL INS. Co</u> of <u>WALTHAM MA</u> have inspected the components described in this Owner's Report during the period <u>11-5-91</u> to <u>8-10-92</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.	
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	
<u>FACTORY MUTUAL SYSTEM</u>	
<u>William R. Rogers III</u> Inspector's Signature	Commissions <u>NB7980 MD 952 NIBS 75</u> National Board, State, Province, and Endorsements
Date <u>AUG. 10</u>	: <u>92</u>

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Baltimore Gas & Electric Co. Date 11-13-91
Name
P.O.Box: 1475 Baltimore, MD 21203
Address
 2. Plant Calvert Cliffs Nuclear Power Plant Sheet 1 of 1
Name
Rt 2-4 Lusby, MD 20657 Unit II
Address MD# 29107211
Repair Organization P.O. No., Job No., etc.
 3. Work Performed by Baltimore Gas & Electric Co. Type Code Symbol Stamp None
Name Authorization No. N/A
P.O.Box: 1475 Baltimore, MD 21203 Expiration Date N/A
Address
 4. Identification of System 52 Safety Injection
B31.1 67 Thru 72
 5. (a) Applicable Construction Code B31.1 19 69 Edition, Thru 71 Addenda N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983 S'83 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Cylinder Serial No. Serial No.	National Board No.	Other Identification Valve Blk. S.N. #	Year ReBuilt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
<u>2-52-48 Hydraulic Snubber</u>	<u>Grinnell Co.</u>	<u>7334535F-27</u>	<u>N/A</u>	<u>9605 B-1-SP</u>	<u>N/A</u>	<u>Replaced</u>	<u>No</u>
<u>2-52-48</u>	<u>Grinnell Co.</u>	<u>73355601-83</u>	<u>N/A</u>	<u>9909 B-1-SP</u>	<u>91</u>	<u>Replacement</u>	<u>No</u>

7. Description of Work Generic R & R Plant for Minor Seal Leak (Hydraulic Snubber) at CCNPP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks _____
 Applicable Manufacturer's Data Reports to be attached _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT conforms to the rules of the ASME Code, Section XI, repair or replacement

Type Code Symbol Stamp None

Certificate of Authorization No. None Expiration Date _____

Signed Roger Cantrell Senior Engineer Date 1-3 19 90
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MD and employed by ARKWRIGHT MUTUAL INS. Co of NORWOOD MA have inspected the components described in this Owner's Report during the period 11-13-91 to 7-3-92 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FACTORY MUTUAL SYSTEM

William R. Roemer Commissions NB7980 MD952 NIBS II
 Inspector's Signature National Board, State, Province, and Endorsements

Date OCT 28 19 92

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: June 2, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: One NISU Ref. No.: G1 Rev. 0
Rts. 2 & 4; Lusby, MD 20657 29205245
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys ASME Sec. XI Class: Two
5. (a) Applicable Construction Code & Class: USAS B31.7 Class 2, 1969 Ed. thru 71 Add
(b) Applicable Installation Code & Class: USAS B31.7 Class 2, 1969 Ed. thru 71 Add
(c) Original Construction/Installation Code & Class: USAS B31.7 Class 2, 1969 Ed. thru 71 Add
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Replace threaded fasteners associated with 2-RV-417 as required during maintenance which did not exhibit the proper code markings or which were damaged during maintenance.

8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XXX
Pressure 2235 psi Test Temperature 120 °F

9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed mechanical joints was performed to satisfy Section XI Pre-Service NDE requirements. NISU Supplement Number 93-20133 implemented the Generic Bolting Replacement Plan which authorized the installation of the piping flange fasteners.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed Roger Cantrell / Union Engineer Date 7-14, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components described in this Owners Report during the period 4-16-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspectors Signature National Board, State, and Endorsements

Date: August 27, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	Line Class CC-6	N/A	Redundant High Pressure Safety Injection System	1977	Y
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P23	N/A	Rod, Allthread, 1/2" X 13TPI SA-193 Gr B7	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 7, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: G1 Rev. 0
Rts. 2 & 4; Lusby, MD 20657 29206305
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 064 System Name: Reactor Coolant Sys. ASME Sec. XI Class: One
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Remove 2-RV-200 from system and replace with valve overhauled by Vendor, replace threaded fasteners not exhibiting the proper code material markings.

8. Tests Conducted: Hydrostatic N/A Pressure 2295 psi Pneumatic N/A Test Temperature 532 °F Nominal Operating Pressure XX

9. Remarks/Code Cases: A Section XI VT-2 Visual Examination of the disturbed mechanical joint was performed during the system conditions listed in Block 8 above. Supplement No. 93-20001 invoked the generic replacement plan which was used to install replacement bolting.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon Engineering Technician Date August 7, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-19-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB8226 ANE MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 13, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2-1/2" CC-10-2007	N/A	Pressurizer Safety Relief Valve Piping	1977	Y
Piping System	Replacement	Cardinal Ind.Products	21647-GX Mech No.75P10	N/A	Nut, Heavy Hex, 1-1/8"X 7TPI, ASME SA-194 Gr. 2H	1989	N
Piping System	Replacement	Cardinal Ind. Prod.	57533-GX Mech No.75P29	N/A	Rod, Allthread, 1-1/8"X 7TPI, ASME SA-193 Gr. B7	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 6, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 92-2-014 thru 014F
Rts. 2 & 4; Lusby, MD 20657 29201060
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 041 System Name: Chemical Volume Cont. ASME Sec. XI Class: Two
5. (a) Applicable Construction Code & Class: ASME Sect. III, Class 2, 1977 Ed. thru W78 Add.
(b) Applicable Installation Code & Class: ASME Sect. III, Class 2, 1977 Ed. thru W78 Add.
(c) Original Construction/Installation Code & Class: ASME Sect. III, Class 2, 1977 Ed. thru W78 Add.
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Install vent line to Charging Pump Suction Stabilizers in accordance with FEC 90-01-102.
8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XX
Pressure 10 psi Test Temperature 120 °F
9. Remarks/Code Cases: This report covers the modifications to the three components listed on the reverse of this form. The modifications were authorized by six separate Replacement Plans. Because of the repetitive nature of the work, only one NIS-2 form is being used to report the replacement. VT-2 Visual Examinations were performed on the welded joints in accordance with Section XI IWA 4400.B.5.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon Engineering Technician Date August 6, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 7-28-92 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 AWE MD 647
Inspector's Signature National Board, State, and Endorsements

Date: September 3, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Vessel	Replaced	Greer Hydraulics	GHI-10099	0517	#21 Charging Pump Suction Stabalizer	1980	Y
Vessel	Replaced	Greer Hydraulics	GHI-10100	0518	#22 Charging Pump Suction Stabalizer	1980	Y
Vessel	Replaced	Greer Hydraulics	GHI-10101	0519	#23 Charging Pump Suction Stabalizer	1980	Y
Vessel	Replacement	Guyon Alloys Inc.	67437-GX Mech No.88162	N/A	3/4" Half Coupling, 3 Ea	1986	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
- Date: September 6, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657
- Unit: TWO
- NISU Ref. No.: 92-2-014G
29201060
- P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657
- Type Code Symbol Stamp: NONE
- Authorization No.: N/A
- Expiration Date: N/A
- ASME Sec. XI Class: TWO
4. Identification of System: Startup No.: 041 System Name: Chemical Volume Cont.
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 71 Add. Class 2
- (b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 71 Add. Class 2
- (c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 71 Add. Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Remove/reinstall & modify as required Piping Supports per FEC 90-01-102.
8. Tests Conducted: Hydrostatic N/A Pressure psi
- Pneumatic N/A Test Temperature F
- Nominal Operating Pressure N/A
9. Remarks/Code Cases: VT-3/4 Visual Examinations of the completed support was performed to satisfy Section XI Pre-service NDE requirements.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Repair conforms to the rules of the ASME Code, Section XI.

Signed: David W. Bacon Engineering Technician Date: September 6, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-21-93 to 4-30-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: September 7, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Repaired	Bechtel	2" CC-7	N/A	Charging Pump Discharge To Control Valves	1977	Y

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
Date: September 3, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657
Unit: 2 NISU Ref. No.: 91-2-044
P.O. No., MWO No. 29104748
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657
Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 41 System Name: Chemical Volume & Control ASME Sec. XI Class: 1
5. (a) Applicable Construction Code & Class: B31.1, 1967 Ed., Code Case N-2 & N10
(b) Applicable Installation Code & Class: B31.1, 1967 Ed., Code Case N-2 & N10
(c) Original Construction/Installation Code & Class: B31.1, 1967 Ed., Code Case N-2 & N10
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Overhaul 2-CV-517 to remove leak repair apparatus. Replace body-to-bonnet gasket and studs as required.
8. Tests Conducted: Hydrostatic N/A Pressure 2235 psi
Pneumatic N/A Test Temperature 450 °F
Nominal Operating Pressure X
9. Remarks/Code Cases: A VT-2 Visual Exam of the disturbed joints was performed during the system conditions listed in Block 8. A VT-1 was performed by the vendor as allowed per ASME XI

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI.
repair or replacement

Signed K. M. Hoffman K. M. Hoffman
Owner's Designee, Title Principal Engineer Date September 3, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 8-19-91 to 11-10-91, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 ANE MD 647
Inspector's Signature National Board, State, and Endorsements

Date: September 3, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	ITT Hammel Dahl	69-4130-013	N/A	2-CVC-517	1977	No
Studs	Replacement	Cardinal Ind. Prod.	PO#49807 Mech 75P26	N/A	Rod, All Thread 3/4"	1990	No
Nuts	Replacement	A & G Engineering	PO#34114GX Mech 75P16	N/A	Nuts, Heavy Hex	1990	No
Nuts	Replacement	Cardinal Ind. Prod.	PO#45795GX Mech 75P07	N/A	Nut, 5/8" 17 tpi	1990	No

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
Date: September 2, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657
Unit: TWO
NISU Ref. No.: 91-2-047
29104598
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657
Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: TWO
4. Identification of System: Startup No.: 052 System Name: Safety Injection
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class 2
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class 2
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace threaded fasteners while correcting a flange leak deficiency.
8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XXX
Pressure 150psi Test Temperature 130°F
9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed Body to Bonnet joint was performed during the System Walkdowns prior to plant start-up.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI.
repair or replacement

Signed _____
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician Date September 2, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 9-3-91 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual System

Robert W. Lawrence
Inspector's Signature

Commissions NB 8226 ANI MD 647
National Board, State, and Endorsements

Date: September 2, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	4" GC3-2005	N/A	HPSI Pump Suction From SDCHX Disch.	1977	N
Piping System	Replacement	Cardinal Ind Products	PO #49807-GX Mech No.75P26	N/A	Rod, Allthread, 3/4" X 10TPI	1990	N
Piping System	Replacement	A & G Engineering	PO #34114-GX Mech No.75P16	N/A	Nut, Heavy Hex, 3/4" X 10TPI	1989	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., 5'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657
4. Identification of System: Startup No.: 083 System Name: Main Steam
5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. thru 72 Add
(b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add
(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Fabricate and install a new Flow Orifice plate in 2-FO-6603
8. Tests Conducted: Hydrostatic Pressure N/A 850 psi Pneumatic Test Temperature N/A 520 °F Nominal Operating Pressure XXX
9. Remarks/Code Cases: VT-2 Visual Examinations of the ~~welded~~ joints were performed during the system conditions listed in section 8 above. The orifice was replaced due to it not conforming to the original design for thickness and orifice size. The Generic Replacement Plan G1 Rev. 0 was invoked by Supplement No. 92-20009.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI.

Signed

Owner or Owner's Designee, Title

David W. Bacon

Engineering Technician

Date August 31, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-21-92 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspector's Signature

Commissions NB 8226 ANI MD 647

National Board, State, and Endorsements

Date: August 31, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Main Steam Piping	Replaced	Bechtel	2-FO-6603	N/A	M. Steam Drain Flow Orifice and Piping	1977	N
Main Steam Piping	Replacement	Durrett Sheppard	67612-GX UP-00184	N/A	Plate Steel, 316 SS	1992	N
Main Steam Piping	Replacement	Cardinal Industrial	56724-GX Mech No75P07	N/A	Nut, Heavy Hex, 5/8"	1992	N
Main Steam Piping	Replacement	Cardinal Industrial	57533-GX Mech No75P25	N/A	Rod, Allthread 5/8"	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'S3 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 6, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two
Rts. 2 & 4; Lusby, MD 20657 NISU Ref. No. 92-2-018
29005641
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657 Type Code Symbol Stamp: NONE
Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys. ASME Sec. XI Class: Two
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add, Class 2
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add, Class 2
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add, Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Modify actuator support @ 2-MOV-399 per MCR 91-052-018-2,3.
8. Tests Conducted: Hydrostatic N/A Pressure psi Pneumatic N/A Test Temperature F Nominal Operating Pressure N/A
9. Remarks/Code Cases: No Section XI preservice examinations were conducted per code case N-408.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon Date August 6, 1993
Owner or Owner's Designee, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 11-11-92 to 6-24-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 9226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 13, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2# GC5-2008	N/A	Reactor Coolant System to LPSI Pump Suction	1977	N
Piping System	Replacement	Dubose Nat. Energy	53792-GX Mech No.75502	N/A	3/8" Plate Steel	1992	N
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P05	N/A	Nut, Heavy Hex, 1/2" X 13TPI SA-194 Gr 2H	1992	N
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P23	N/A	Rod, Allthread, 1/2" X 13TPI SA-193 Gr B7	1991	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 31, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 92-2-028
Rts. 2 & 4; Lusby, MD 20657 29204061
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys. ASME Sec. XI Class: TWO
5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. thru 1972 Add.
- (b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. thru 1972 Add.
- (c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. thru 1972 Add.
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace valve 2-MOV-6603 per FCR 88-142; WPCS #6 due to being internally damaged and there being no replacement parts available to support an overhaul. Replace with a 1700 series Anchor/Darling double disc gate Valve.
8. Tests Conducted: Hydrostatic XX Pneumatic N/A Nominal Operating Pressure N/A
Pressure 1500psi Test Temperature 81.6 °F

9. Remarks/Code Cases: A VT-2 Visual Examination of the welded joints was performed during the system conditions listed in block 8 above. All welded joints recieved a VT-2 Visual Examination at system NOP/NOT in addition to the cold hydrostatic test. The replacement plan was revised under supplement numbers 93-20095 & 93-20165.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI, repair or replacement

Signed

David W. Bacon
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician

Date: August 31, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 2-25-93 to 5-25-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspectors Signature

Commissions NB 8226 ANI MD 647
National Board, State, and Endorsements

Date: August 31, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2"EB1-2041/3 & 2-MOV-6603	N/A	Main Steam Drain System Piping for Drain #5	1977	N
Piping System	Replacement	Hub Inc.	79292-GX Mech No.Q7235	N/A	2" Schedule 80 Pipe	1992	N
Piping System	Replacement	Hub Inc.	57357-GX Mech No.75991	N/A	2" Schedule 80 Pipe	1992	N
Piping System	Replacement	Hub Inc.	79292-GX Mech No.Q7233	N/A	2" 90 Deg. Elbow, 3000Lb socket weld	1992	N
Piping System	Replacement	Hub Inc.	79292-GX Mech No.Q7234	N/A	2" 90 Deg. Tee, 3000 Lb. socket weld	1992	N
Piping System	Replacement	Hub Inc.	79292-GX Mech No.Q7232	N/A	2" Raised Face Flange 3000 Lb. socket weld	1992	N
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P25	N/A	Rod, Allthread, 5/8" X 11TPI SA-193 GrB7	1992	N
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P07	N/A	Nut, Heavy Hex, 5/8" X 11TPI SA-194 Gr2H	1992	N
Piping System	Replacement	Anchor Darling	55764-G S/N GB958-1-2	N/A	2" 1700 Lb. Double Disc Gate Valve socket weld	1991	N
Piping System	Replacement	Tioga Pipe Supply	79354-GX Mech No.Q7241	N/A	1/8" Sheet Steel	1992	N
Piping System	Replacement	Grinnell Corporation	54500-GX Mech No.88757	N/A	Clamp, Restraint Base 2"	1991	N
Piping System	Replacement	Hub Inc.	43220-GX Mech No.88752	N/A	Clamp, Restraint Base 2"	1990	N
Piping System	Replacement	Cardinal Ind Prbducts	PO #57352-GX Mech No.NX063	N/A	Bolt, Heavy Hex, 1/2" X 13TPI SA-193 Gr 7	1991	N
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P05	N/A	Nut, Heavy Hex, 1/2" X 13TPI SA-194 Gr 2H	1992	N
Piping System	Replacement	Dubose Nat. Energy	68118-GX Mech No.88700	N/A	Tubing, Structural Square 4" X 4" X 1/4"	1992	N
Piping System	Replacement	Dubose Nat. Energy	53792-GX Mech No.75503	N/A	1/2" Plate Steel	1992	N
Piping System	Replacement	Dubose Nat. Energy	53792-GX Mech No.88710	N/A	3" X 3" X 1/4" Angle Iron	1990	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 28, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657

Unit: TWO

NISU Ref. No.: 92-2-029
29204062
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE

Authorization No.: N/A

Expiration Date: N/A

ASME Sec. XI Class: TWO

4. Identification of System: Startup No.: 083 System Name: Main Steam Sys.

5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. thru 1972 Add.

(b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. thru 1972 Add.

(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. thru 1972 Add.

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Replace valve 2-MOV-6604 per FCR 88-142; WPCS #6 due to being internally damaged and there being no replacement parts available to support an overhaul. Replace with a 1700 series Anchor/Darling double disc gate Valve.

8. Tests Conducted: Hydrostatic XX
Pressure 1500 psi

Pneumatic N/A Nominal Operating Pressure N/A
Test Temperature 31.6 °F

9. Remarks/Code Cases: A VT-2 Visual Examination of the welded joints was performed during the system conditions listed in block 8 above. All welded joints recieved a VT-2 Visual Examination at system NOP/NOT in addition to the cold hydrostatic test. The replacement plan was revised under supplement numbers 93-20156 & 93-20166.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: David W. Bacon
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician Date August 28, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 2-25-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspector's Signature

Commissions NB 8226 ANI MD 647
National Board, State, and Endorsements

Date: August 30 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2"EB1-2042/3 & 2-MOV-6604	N/A	Main Steam Drain System Piping for Drain #6	1977	N
Piping System	Replacement	Hub Inc.	76446-GX Mech No.Q7235	N/A	2" Schedule 80 Pipe	1992	N
Piping System	Replacement	Hub Inc.	57357-GX Mech No.75991	N/A	2" Schedule 80 Pipe	1992	N
Piping System	Replacement	Hub Inc.	79292-GX Mech No.Q7233	N/A	2" 90 Deg. Elbow, 3000Lb socket weld	1992	N
Piping System	Replacement	Hub Inc.	79292-GX Mech No.Q7234	N/A	2" 90 Deg. Tee, 3000 Lb. socket weld	1992	N
Piping System	Replacement	Hub Inc.	79292-GX Mech No.Q7232	N/A	2" Raised Face Flange 3000 Lb. socket weld	1992	N
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P25	N/A	Rod, Allthread, 5/8" X 11TPI SA-193 GrB7	1992	N
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P07	N/A	Nut, Heavy Hex, 5/8" X 11TPI SA-194 Gr2H	1992	N
Piping System	Replacement	Anchor Darling	55764-G S/N GB958-1-1	N/A	2" 1700 Lb. Double Disc Gate Valve socket weld	1991	N
Piping System	Replacement	Tioga Pipe Supply	79354-GX Mech No.Q7241	N/A	1/8" Sheet Steel	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 Edition, S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 11, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two
Rts. 2 & 4; Lusby, MD 20657

NISU Ref. No. 92-2-032
29205479
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No. N/A
Expiration Date: N/A
ASME Sec. XI Class: TWO

4. Identification of System: Startup No.: 083 System Name: Main Steam

5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. thru 72 Add

(b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add

(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Relocate 2-FE-1111 to a new location, install a pipe spool in the vacated opening per FCR-91-261.

8. Tests Conducted: Hydrostatic N/A Pressure 1300 psi Pneumatic N/A Test Temperature 435 °F Nominal Operating Pressure XXX.

9. Remarks/Code Cases: VT-2 Visual Examinations of the welded joints were performed during the system conditions listed in section 8 above IAW Code Case N-416; which was invoked due to the system being un-isolable for a Hydrostatic test. Section XI radiographic and Ultra Sonic examinations were performed on all welded joints to also satisfy Code Case N-416 requirements.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: [Signature]
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician Date: August 11, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected

the components described in this Owners Report during the period 2-18-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature]
Inspector's Signature

Commissions NB 8226 ANI MD 647
National Board, State, and Endorsements

Date: August 24, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Feed Water Piping	Replaced	Bechtel	16" DB1-2018 & 2-FE-1111	N/A	Feed Water Discharge to Steam Generator	1977	N
Feed Water Piping	Replacement	Hub Inc.	77083-GX Mech No59C74	N/A	Pipe, Schedule 80 16", SA-106	1992	N

FORM NIS-2 (OWNER'S REPORT FOR REPAIRS OR PLACEMENTS)

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203Date: August 17, 1993
Sheet: 1 of 12. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO
Rts. 2 & 4; Lusby, MD 20657NISU Ref. No.: 92-2-033
29205478
P.O. No., MWO No.3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: TWO4. Identification of System: Startup No.: 083 System Name: Main Steam5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. thru 72 Add(b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Relocate 2-FE-1121 to a new location, install a pipe spool in the vacated opening per FCR-91-261.

8. Tests Conducted: Hydrostatic N/A Pressure 1300 psi Pneumatic N/A Test Temperature 435 °F Nominal Operating Pressure XXX.

9. Remarks/Code Cases: VT-2 Visual Examinations of the welded joints were performed during the system conditions listed in section 8 above IAW Code Case N-416; which was invoked due to the system being un-isolable for a Hydrostatic test. Section XI radiographic and Ultra Sonic examinations were performed on all welded joints to also satisfy Code Case N-416 requirements.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician Date August 17, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected

the components described in this Owners Report during the period 2-18-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Inspectors Signature

Commissions NB 8226 ANI MD 647

National Board, State, and Endorsements

Date: August 30 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Feed Water Piping	Replaced	Bechtel	16" DB1-2019 & 2-FE-1121	N/A	Feed Water Discharge to Steam Generator	1977	N
Feed Water Piping	Replacement	Hub Inc.	77083-GX Mech No59C74	N/A	Pipe, Schedule 80 16", SA-106	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 13, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-034
Rts. 2 & 4; Lusby, MD 20657 29106427
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 045 System Name: Feed Water System ASME Sec. XI Class: Two/MC
5. (a) Applicable Construction Code & Class: ASME Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 2
(b) Applicable Installation Code & Class: ASME Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 2
(c) Original Construction/Installation Code & Class: ASME Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace 2-MOV-4516 valve wedge IAW the MM 91-045-018-0.
8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XXX
Pressure 1300psi Test Temperature 435°F
9. Remarks/Code Cases: A Surface and Magnetic Particle Examination of the Replacement Wedge was performed prior installation, a VT-2 Visual Examination of the disturbed Body to Bonnet joint was performed during the System Walkdowns prior to plant start-up.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

David W. Bacon
Owner or Owner's Designee, Title

David W. Bacon

Engineering Technician

Date August 13, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 12-2-92 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Factory Mutual System

Robert W. Lawrence
Inspector's Signature

Commissions NB 5226 ANZ

MD 647

National Board, State, and Endorsements

Date: August 27, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Velan Engineering	0034	N/A	#21 S/G Feed Water Iso Valve, 2MOV4516	1977	Y
Valve	Replacement	Velan Engineering	PC #51110-GX Ser. #3871	N/A	Wedge, Valve 16"	1992	N
Valve	Replacement	Cardinal Ind. Products	PO #57533-GX	N/A	Nut, Heavy Hex 7/8" X 9TPI	1992	N
Valve	Replacement	Cardinal Ind. Products	PO #57533-GX	N/A	Rod, Allthread 7/8" X 9TPI	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657
4. Identification of System: Startup No.: 045 System Name: Feed Water System
5. (a) Applicable Construction Code & Class: ASME Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 2
(b) Applicable Installation Code & Class: ASME Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 2
(c) Original Construction/Installation Code & Class: ASME Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace 2-MOV-4517 valve wedge IAW the MM 91-045-018-0.
8. Tests Conducted: Hydrostatic N/A Pressure 1300psi Pneumatic N/A Nominal Operating Pressure XXX Test Temperature 435°F
9. Remarks/Code Cases: A Liquid Penetrant examination of the replacement wedge was performed prior to installation, a VT-2 Visual Examination of the disturbed Body to Bonnet joint was performed during the System Walkdowns prior to plant start-up.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon Engineering Technician Date August 24, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 12-2-92 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 24, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Velan Engineering	0030	N/A	#22 S/G Feed Water Iso Valve, 2MOV4517	1975	Y
Valve	Replacement	Velan Engineering	PO #51110-GX Ser. #3873	N/A	Wedge	1991	N
Valve	Replacement	Cardinal Ind. Products	PO #57533-GX	N/A	Nut, Heavy Hex 7/8" X 9TPI	1992	N
Valve	Replacement	Cardinal Ind. Products	PO #57533-GX	N/A	Rod, Allthread 7/8" X 9TPI	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 20, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 92-2-046
Rts. 2 & 4; Lusby, MD 20657 29205593
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys ASME Sec. XI Class: One
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One
(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. No Add. w/Code Case N-10 &
USAS B31.7 1969 Ed. thru 1971 Add. Class Two.
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Replace existing 22B Safety Injection Tank Check Valve 2-SI-235 per FCR 89-14.

8. Tests Conducted: Hydrostatic XX Pneumatic N/A Nominal Operating Pressure N/A
Pressure 2734 psi Test Temperature 72 °F

9. Remarks/Code Cases: A VT-2 Visual Examinations of the downstream welded joints was performed during the system conditions listed above in block 8. The upstream welded joint recieved a VT-2 Visual Examination during normal operating pressure and temperatures per IWA 5214(d). A VT-1 Visual Examination of the new bolting and a VT-3 Visual Examination of the valve internal surfaces was performed and documented under MWO 29207208. Section XI Surface and Volumetric Examinations were performed on circumferential welds.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon Date August 20, 1993
Owner or Owner's Designee, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 1-26-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert L. Lawrence Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 24, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Atwood & Morrill Co.	4-771	N/A	22B Safety Inj. Tank Outlet Check Valve	1975	N
Valve	Replacement	Atwood & Morrill Co.	PO# 60394-GX 7-16296-01	N/A	12" 1500# Swing Check Valve - Tag No. 2-SI-235	1991	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 24, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 92-2-048
Rts. 2 & 4; Lusby, MD 20657 29205595
P.O.No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys ASME Sec. XI Class: One
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One
(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. No Add. w/Code Case N-10 &
USAS B31.7 1969 Ed. thru 1971 Add. Class Two.
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Replace existing 21B Safety Injection Tank Check Valve 2-SI-215 per FCR 89-14.

8. Tests Conducted: Hydrostatic XX Pneumatic N/A Nominal Operating Pressure N/A
Pressure 2734 psi Test Temperature 72 °F

9. Remarks/Code Cases: A VT-2 Visual Examinations of the downstream welded joints was performed during the system conditions listed above in block 8. The upstream welded joint recieved a VT-2 Visual Examination during normal operating pressure and temperatures per IWA 5214(d). A VT-1 Visual Examination of the new bolting and a VT-3 Visual Examination of the valve internal surfaces was performed and documented under MWO 29207210. Section XI Surface and Volumetric Examinations were performed on circumferential welds. The Replacement Plan was revised using Supplement No. 93-20093, which added material to the list of authorized replacements; and 93-20120 which made editorial changes to the Replacement Plan.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

Owner or Owner's Designee, Title

David W. Bacon

Engineering Technician

Date August 24, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 1-26-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Inspector's Signature

Commissions NB 8226 ANI

MD 647

National Board, State, and Endorsements

Date: August 24, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Atwood & Morrill Co.	1-771	N/A	21B Safety Inj. Tank Outlet Check Valve	1975	N
Valve	Replacement	Atwood & Morrill Co.	PO# 60394-GX 2-16296-01	N/A	12" 1500# Swing Check Valve - Tag No. 1-SI-215	1991	N
Valve	Replacement	Atwood & Morrill Co.	PO# 68525-GX	N/A	12" Schedule 140 Pipe ASME SA-376 Type 316	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 19, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 92-2-049
Rts. 2 & 4; Lusby, MD 20657 29205597
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys ASME Sec. XI Class: One
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One
(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. No Add. w/Code Case N-10 &
USAS B31.7 1969 Ed. thru 1971 Add. Class One.
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace existing 21A Safety Injection Tank Check Valve 2-SI-225 per FCR 89-14.

8. Tests Conducted: Hydrostatic XX Pneumatic N/A Nominal Operating Pressure N/A
Pressure 2734 psi Test Temperature 72 °F

9. Remarks/Code Cases: A VT-2 Visual Examinations of the downstream welded joints was performed during the system conditions listed above in block 8. The upstream welded joint recieved a VT-2 Visual Examination during normal operating pressure and temperatures per IWA 5214(d). A VT-1 Visual Examination of the new bolting and a VT-3 Visual Examination of the valve internal surfaces was performed and documented under MWO 29207207. Section XI Surface and Volumetric Examinations were performed on circumferential welds.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

Owner or Owner's Designee, Title

David W. Bacon

Engineering Technician

Date August 19, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 1-26-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspector's Signature

Commissions NB 8226 ANI

MD 647

National Board, State, and Endorsements

Date: August 20, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Atwood & Morrill Co.	2-771	N/A	21A Safety Inj. Tank Outlet Check Valve	1975	N
Valve	Replacement	Atwood & Morrill Co.	PO# 60394-GX 6-16296-01	N/A	12" 1500# Swing Check Valve - Tag No. 2-SI-225	1991	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 19, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657 Unit: TWO

NISU Ref. No.: 92-2-050
29205619
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No. N/A
Expiration Date: N/A
ASME Sec. XI Class: One

4. Identification of System: Startup No.: Safety Injection Sys. System Name: S

5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One

(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One

(c) Original Construction Installation Code & Class: USAS B31.1 1967 Ed. No Add. w/Code Case N-10 & USAS B31.7 1969 Ed. thru 1971 Add. Class One.

5. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Replace existing 22A Safety Injection Tank Check Valve 2-SI-245 per FCR 89-14.

8. Tests Conducted: Hydrostatic XX Pressure 2734 psi Pneumatic N/A Test Temperature 72 °F Nominal Operating Pressure N/A

9. Remarks/Code Cases: A VT-2 Visual Examination of the downstream welded joints was performed during the system conditions listed above in block 8. The upstream welded joint recieved a VT-2 Visual Examination during normal operating pressure and temperatures per IWA 5214(d). A VT-1 Visual Examination of the new bolting and a VT-3 Visual Examination of the valve internal surfaces was performed and documented under MWO 29207209. Section XI Surface and Volumetric Examinations were performed on circumferential welds.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: David W. Bacon Date: August 19, 1993
Owner or Owner's Designee, Title: Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 1-26-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 20, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Atwood & Morrill Co.	Not Available	N/A	22A Safety Inj. Tank Outlet Check Valve	1975	N
Valve	Replacement	Atwood & Morrill Co.	8-16296-01	N/A	12" 1500# Swing Check Valve - Tag No. 2-SI-245	1991	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., 5'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 17, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657 Unit: TWO

NISU Ref. No.: 92-2-055
29206751
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No. N/A
Expiration Date: N/A
ASME Sec. XI Class: One

4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys

5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class One

(b) Applicable Installation Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class One

(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class One & Two

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Modify Injection Tank Check Valve supports per FCR 89-14.

8. Tests Conducted: Hydrostatic N/A
Pressure psi

Pneumatic N/A Nominal Operating Pressure N/A
Test Temperature F

9. Remarks/Code Cases: A VT-3 Visual Examination of the completed piping supports was performed to satisfy Section XI Pre-Service NDE requirements.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician Date August 17, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-15-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspectors Signature

Commissions NB 8226 ANI MD 647
National Board, State, and Endorsements

Date: August 20, 1993

6. Identification of Component's Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2#CC4-2004 & CC13-2009-11	N/A	Safety Ingection Tank Outlet Piping Supports	1977	Y
Piping System	Replacement	Hub Inc.	PO# 75639-GX Mech No.Q7054	N/A	Tube Steel, 3"X 3"X 1/4"	1992	N
Piping System	Replacement	Hub Inc.	PO# 75639-GX Mech No.Q7055	N/A	Tube Steel, 2"X 2"X 1/4"	1992	N
Piping System	Replacement	Hub Inc.	PO# 75639-GX Mech No.Q7056	N/A	1/2" Plate Steel	1992	N
Piping System	Replacement	Hub Inc.	PO# 75639-GX Mech No.Q7057	N/A	1/4" Plate Steel	1992	N
Piping System	Replacement	Grinnell Corporation	PO# 79183-GX Mech No.7237	N/A	12 In. Pipe Clamp	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 31, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 92-2-060
Rts. 2 & 4; Lusby, MD 20657 29108082
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: 2
4. Identification of System: Startup No.: 083 System Name: Main Steam
5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. thru 72 Add
(b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add
(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Fabricate and install a new Flow Orifice and associated piping to replace the original which was steam cut as a result of a leaking Flexitalic Gasket.

8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XXX
Pressure 850 psi Test Temperature 520 °F

9. Remarks/Code Cases: VT-2 Visual Examinations of the welded joints were performed during the system conditions listed in section 8 above IAW Code Case N-416; which was invoked due to the system being un-isolable for a Hydrostatic test. Section XI surface examinations were performed on all welded joints (SW) to also satisfy Code Case N-416 requirements.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed [Signature]
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician Date August 31, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 12-3-92 to 1-14-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature]
Inspector's Signature

Commissions NB 8226 ANC MD 647
National Board, State, and Endorsements

Date: August 31, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Main Steam Piping	Replaced	Bechtel	2"EB-01-2041 & 2-FO-6603	N/A	M. Steam Drain Flow Orifice and Piping	1977	N
Main Steam Piping	Replacement	Dubose Nat. Energy Svcs	54906-GX Mech No88076	N/A	Flange, Raised Face 2" 600# Sch. 80	1991	N
Main Steam Piping	Replacement	Hub Inc.	57357-GX Mech No75991	N/A	Pipe, 2" Schedule 80	1992	N
Main Steam Piping	Replacement	Tioga Pipe Supply	52125-GX Mech No75149	N/A	2" Schedule 80 Tee 3000 Lb. SW	1990	N
Main Steam Piping	Replacement	Dubose Nat. Energy Svcs	79282-GX Mech No N/S	N/A	Plate Steel, 316 SS	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 7, 1993
Sheet: 1 of 1

2. Plant/Address Calvert Cliffs Nuclear Power Plant Unit: TWO
Rts. 2 & 4; Lusby, MD 20657

NISU Ref. No.: 92-2-065
29206305
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No. N/A
Expiration Date: N/A
ASME Sec. XI Class: One

4. Identification of System: Startup No.: 064 System Name: Reactor Coolant Sys.

5. (a) Applicable Construction Code & Class: ASME Section III, Class One 1968 Edition, thru Winter 68 Add.

(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class One

(c) Original Construction/Installation Code & Class: ASME Section III, Class One 1968 Edition, thru Winter 68 Add./
USAS B31.7 1969 Ed. thru 1971 Add. Class One

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Remove 2-RV-200 from system and replace with valve overhauled by Vendor.

8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XX
Pressure 2295 psi Test Temperature 532 °F

9. Remarks/Code Cases: A Section XI VT-2 Visual Examination of the disturbed mechanical joint
was performed during the system conditions listed in Block 8 above.

Applicable Manufacturer's Data Reports to be Attached

Note:

Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules
of the ASME Code, Section XI. repair or replacement

Signed

David W. Bacon
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician

Date August 7, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 1-19-93 to 6-6-93 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspectors Signature

Commissions NB 8226 ANI

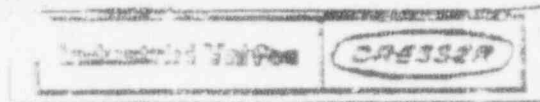
MD647

National Board, State, and Endorsements

Date: August 13, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Dresser Indus. Valve	BM-07952 Tag No. RC200	N/A	Pressurizer Steam Safety Relief Valve	1977	Y
Valve	Replacement	Dresser Indus. Valve	BV-02950 Tag No. RC200	N/A	Pressurizer Steam Safety Relief Valve	1982	Y



***CORRECTED REPORT**

Alexandria, LA USA

FORM NVR-1 REPORT OF REPAIR ☒ MODIFICATION ☐ OR REPLACEMENT ☐ OF NUCLEAR PRESSURE RELIEF DEVICE

Work performed by Dresser Industries, Inc., Dresser Valve & Controls Div., Industrial Valve Operations,
Intercession U.S. Hwy. 167 & LA 2225 North, Alexandria, LA (Name of Repair Organization)

2. Owner (Name) Baltimore Gas & Electric Co., 1850 Calvert Cliffs Parkway
 (Address) Luxury, MD 20657

3. Name, address and identification of nuclear power plant Baltimore Gas & Electric Co.,
Calvert Cliffs Nuclear St., 1850 Calvert Cliffs Parkway, Luxury, MD 20657

4. a. Identification of repaired pressure relief device: Safety Valve
 b. Name of manufacturer: See Above
 c. Identifying no. 14" 31739A (type) 3V-02850 (mfr's. serial no.) N/A (Nat'l Bd. no.) Steam (service) 14" (size) 1982 (year built)

5. Applicable edition of ASME Code Section XI under which repairs, modifications or replacements were made: (edition) 1982
 (addenda) Summer 1982 (code case) N/A

6. Applicable edition of ASME Code Section III to which repairs, modifications or replacements were made: (edition) 1982
 (addenda) Winter 1982 (code case) N/A

7. Design responsibility: See 1. Above

8. Operating pressure: 2455 PSIG Blowdown (if applicable): N/A Set pressure and blowdown adjustments made at
 (location) Wyle Laboratories, Huntsville, Alabama using (test media) Steam

9. Description of work: (include name and identifying no. of replacement part)
Disassembled, inspected, cleaned, reassembled and tested

Part 14" Disc P/N 184040405417, Serial No. AAC51

10. Remarks:
* Corrected to list code parts only.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in the publications NB-85 and NB-102, current editions.

Certificate of Authorization No. 127 to use the "VR" stamp expires 02/30 19 83
 Certificate of Authorization No. 42 to use the "NR" stamp expires 08/30 19 83

Date 12-13 19 82 Signed Same as 1 above (repair organization) [Signature] (Authorized representative) Principal QA Engineer (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of MISSISSIPPI and employed by The Hartford Steam Boiler Inspection and Insurance Co., of Hartford, CT have inspected the repair, modification or replacement described in this report on 12-13 19 82 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publications NB-85 and NB-102, current editions. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 12-13 19 82 [Signature] (Authorized inspector) U67779 "N" & "A" 14664 (Net'l Bd No. (including endorsements) state or province & no.)

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 23, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two
1650 Calvert Cliffs Parkway; Lusby, Md. 20657 NISU Ref. No.: 92-2-066 & 066b
29200509
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657 Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: Two
4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys
5. (a) Applicable Construction Code & Class: ASME B&PV Code Sect. III, 1968 Ed. thru W1970 Add. Class C
(b) Applicable Installation Code & Class: N/A
(c) Original Construction/Installation Code & Class: ASME B&PV Code Sect. III, 1968 Ed. thru W1970 Add. Class C
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Repair weld on the 18" A-Train Safety Injection Line at the #21 Refueling Water Tank Nozzle.

8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XX
Pressure psi Test Temperature 80°F

9. Remarks/Code Cases: * A VT-2 Visual Examination of the disturbed welded joints was performed with #21 Refueling Water Tank level at 39'. A Surface Examination of the Repair Welds was performed as a Section XI Pre-Service Exam. Replacement Plan 92-2-066 was revised by supplement numbers 93-20124, 20141 & 20145, all of which provided editorial changes. R&R 92-2-066 documented the suitability evaluation of the Tank Repairs while R&R 93-2-066b documented temporary attachment welds which supported the tank repairs.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: David W. Bacon Date August 23, 1993
Owner or Owner's Designee, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 2-22-93 to 5-24-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8225 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 24, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Tank	Replaired	Pittsburgh Des Moines Steel	# 19627	N/A	Safety Injection Refueling Water Tank #21	1970	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 23, 1993
Sheet: 1 of 1

2. Plant/Address Calvert Cliffs Nuclear Power Plant Unit: TWO
1650 Calvert Cliffs Parkway; Lusby, Md. 20657

NISU Ref. No.: 93-2-003
29105118
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No. N/A
Expiration Date: N/A
ASME Sec. XI Class: Two

4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys

5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add., Class 2

(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add., Class 2

(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add., Class 2

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Modify Restraint #10 on 4" GC3-2005 to allow the performance of FCR 91-271 on #21 & #22 Shut Down Heat Exchangers in accordance with FCR 91-271 (Install helical spacers to reduce tube vibrations.)

8. Tests Conducted: Hydrostatic N/A Pressure PSI Pneumatic N/A Test Temperature F Nominal Operating Pressure N/A

9. Remarks/Code Cases: A VT-3 Visual Examination of the restraint was performed following modifications.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

Owner or Owner's Designee, Title

David W. Bacon

Engineering Technician

Date: August 23, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 1-14-93 to 3-5-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Inspector's Signature

Commissions NB 9226 ANI MD 647

National Board, State, and Endorsements

Date: September 2, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	4" GC3-2005 Restraint #10	N/A	HP Safety Injection Pump Suct from S/D Cooling HX	1977	H

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 17, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-005
Rts. 2 & 4; Lusby, MD 20657 29205302
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 061 System Name: Containment Spray ASME Sec. XI Class: Two
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class 2
(b) Applicable Installation Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class 2
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Modify Anchor 8" HC-33-2005-A1 in accordance with MCR #92-061-012
8. Tests Conducted: Hydrostatic N/A Pressure psi Pneumatic N/A Test Temperature F Nominal Operating Pressure N/A
9. Remarks/Code Cases: A VT-3 Visual Examination of the completed piping supports was performed to satisfy Section XI Pre-Service NDE.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed [Signature] David W. Bacon
Owner or Owner's Designee, Title Engineering Technician Date August 17, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 2-22-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature] Commissions NB 8226 AWI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 27 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	8"HC33-2005 Anchor A1	N/A	Containment Spray Piping support Anchor	1977	N
Piping System	Replacement	Dubose Nat. Energy	53792-GX Mech No.75503	N/A	1/2" Plate Steel	1992	N
Piping System	Replacement	Dubose Nat. Energy	53792-GX Mech No.75505	N/A	3/4" Plate Steel	1992	N
Piping System	Replacement	Dubose Nat. Energy	78281-GX Mech No.Q7218	N/A	8" X 8" X 1/2"Tube Steel	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO
Rts. 2 & 4; Lusby, MD 20657
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657
4. Identification of System: Startup No.: 061 System Name: Containment Spray sys
5. (a) Applicable Construction Code & Class: ASME Section III, Class 2, 1980 Edition thru W82 Addenda and ASME Section III, Class 2, 1986 Edition thru 1988 Addenda
- (b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 71 Add. Class 2
- (c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 71 Add. Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace the Spring Can Hangers for hanger HC-33-2001-H4-R8 on the Containment Spray Header.
8. Tests Conducted: Hydrostatic N/A Pressure psi Pneumatic N/A Test Temperature F Nominal Operating Pressure N/A
9. Remarks/Code Cases: No Section XI examinations were performed in accordance with Code Case N-408. The replacement plan was revised with Supplement No. 93-20203 which revised the list of replacement items.

Date: August 10, 1993
Sheet: 1 of 1
NISU Ref. No.: 93-2-006
29205305
P.O. No., MWO No.
Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: Two

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: David W. Bacon Date: August 10, 1993
Owner or Owner's Designee, Title: Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 2-20-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 16, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	HC-33-2001-H4 HC-33-2001-R8	N/A	Containment Spray Pping	1977	Y
Piping System	Replacement	Grinnell Corporation	PO No.75617-GX S/N 1992-433	N/A	Spring Can Hanger, Grin. Fig. 82N. Size 6, Type B	1992	Y
Piping System	Replacement	Grinnell Corporation	PO No.83521-GX S/N 1993-57	N/A	Spring Can Hanger, Grin. Fig. 82N. Size 6, Type B	1993	Y

1. Manufactured by Grinnell Corporation - 1341 Elmwood Ave. - Cranston, RI 02910
(name and address of NPT Certificate Holder)
2. Manufactured for Baltimore Gas & Electric Co. - Baltimore, MD 21203
(name and address of Purchaser)
3. Location of installation Calvert Cliffs Nuclear Station - MD Rts 2 & 4 - Calvert County, Lusby, MD 20657
(name and address)
4. Type: C.S.S. DRS 82, Rev. 7 1992
(describe) (Design Report or Load Capacity Data Sheet) (year built)
5. ASME Code, Section III, Division 1: 1980 Winter, 1982 2 Note 1
(edition) (addenda and date) (class) (Code Case No.)
6. Identification

	(a) Component Support I.D. No.	(b) Material Specification No.	(c) Canadian Registration No.	(d) Applicable Drawings With Last Rev. & Date	(e) National Board No.
(1)	1992-432	Note 2	N/A	SN-1191, Rev. K, 8-28-87	N/A
(2)					
(3)					
(4)					
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

7. Remarks: Notes - 1: W-71, W-247, W-249
2: SA-36, SA-53 GR B
P.O. #75617GX
Item #1
S.O. #41-12218

*Supplemental information in the forms of lists, sketches, or drawings may be used provided (1) size 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Component Support I.D. Nos. 1992-432 through -----

CERTIFICATION OF DESIGN

Design Specification certified by J. E. Perry P.E. State IL Reg. No. 62-32075
 Design Report certified by F. J. Birch P.E. State RI Reg. No. 4169

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

WPT Certificate of Authorization No. M-2802 Expires 9-29-95

Date 12-1-92 Name Grinnell Corporation Signed *Chetum*
 (WPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by M.S.B. & L. Co. of Hartford, CT have inspected the component supports described in this Data Report on December 1, 1992, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 12/1/92 Signed *J. M. Burke* Commissions NB 11002 (N.A.) NY 5061
 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

1. Manufactured by Grinnell Corporation - 1341 Elmwood Ave. - Cranston, RI 02910
(name and address of NPT Certificate Holder)

2. Manufactured for Baltimore Gas & Electric Co. P.O. Box 1472, Baltimore, MD 21203
(name and address of Purchaser)

3. Location of installation Calvert Cliffs Nuclear Plant, 1650 Calvert Cliffs Parkway, Lusby, MD 20657
(name and address)

4. Type: C.S.S. DRS 82, Rev. 7 1982
(describe) (Design Report of Load Capacity Data Sheet) (year built)

5. ASME Code, Section III, Division 1: 1980 Winter, 1982 2 Note 1
(edition) (addenda and date) (class) (Code Case No.)

6. Identification

(a) Component Support I.D. No.	(b) Material Specification No.	(c) Canadian Registration No.	(d) Applicable Drawings with Last Rev. & Date	(e) National Board No.
(1) 1992-57	Note 2	N/A	BH-1191, Rev.K, 8-28-87	N/A
(2)				
(3)				
(4)				
(5)				
(6)				
(7)				
(8)				
(9)				
(10)				

7. Remarks: Notes: 1 N71, N247

2 - SA-53 Gr.B, SA-36,

P.O. #63521GK

S.O. #41-13865

*Supplemental information in the forms of lists, sketches, or drawings may be used provided (1) size 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Component Support I.D. Nos. 1995-57 through -----

CERTIFICATION OF DESIGN

Design Specification certified by J. E. PERRY P.E. State IL Reg. No. 82-32073
 Design Report certified by P. J. BIRCH P.E. State RI Reg. No. 4149

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.


NPT Certificate of Authorization No. W-2802 Expires 8-29-95

Date 4-27-93 Name Grinnell Corporation Signed 
 (NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by A.S.B. & J. Co. of Hartford, CT have inspected the component supports described in this Data Report on April 27, 1993 and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4/27/93 Signed  Commissions NB/1002 & A) NY 5061
 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: September 1, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-015
Rts. 2 & 4; Lusby, MD 20657 29103938
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys ASME Sec. XI Class: TWO
5. (a) Applicable Construction Code & Class: USAS B31.7 Class 2, 1969 Ed. thru 71 Add
Draft Pump & Valve Code 1968 Ed. thru 1970 Add Class 2
(b) Applicable Installation Code & Class: USAS B31.7 Class 2, 1969 Ed. thru 71 Add
(c) Original Construction/Installation Code & Class: USAS B31.7 Class 2, 1969 Ed. thru 71 Add
Draft Pump & Valve Code 1968 Ed. thru 1970 Add Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace 2-SI-449.
8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XXX
Pressure 180 psi Test Temperature 100 °F

9. Remarks/Code Cases: Section XI surface examinations of the installation welds were performed to satisfy Code Case N-416 which was invoked due to system configuration. A VT-2 Visual Examination of the welded joints was performed to satisfy Section XI Pre-Service NDE requirements as well as Code Case N-416. NISU Supplement Number 93-20136 revised to original Replacement Plans Attachment One to modify the list of authorized replacement items.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI.

Signed

Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician

Date: September 1, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components described in this Owners Report during the period 3-31-92 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Inspectors Signature

Commissions NB 9224 ANI MD 647

National Board, State, and Endorsements

Date: September 1, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	GC7-2017/2018 and 2-SI-449	N/A	Safety Injection & Cont. Spray recirc to RWT.	1977	Y
Piping System	Replacement	Velan Engineering	PO #66737-GX Mech No.96R01	N/A	2" Globe Valve, 600 Lb.	1991	Y
Piping System	Replacement	Hub Inc.	PO #57357-GX Mech No.75628	N/A	Pipe, 1-1/2" Schedule 40 SA-376 Type 304	1992	N
Piping System	Replacement	McJunkin Corporation	PO #45025-GX Mech No.88181	N/A	Reducer Insert, 3000 Lb. 2" X 1-1/2"	1979	N

D. W.

Pg. 1 of _____

25 x 11 1/2

Certificate holder's Serial No. 9211288. Design conditions NA psi NA °F or valve pressure class 80 (1)9. Cold working pressure 1020 psi at 100°F10. Hydrostatic test: 2005 psi. Disk differential test pressure 200 psi11. Remarks: MATERIALS MEET ASME SECTION II EDITION: 1986ASME CODE

CERTIFICATION OF DESIGN

Design Specification certified by TARO M. CAHO P.E. State MARYLAND Reg. no. 12776
Design Report certified by NA P.E. State NA Reg. no. NA

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. W-2393-1 Expires MAY 3/95Date Aug 7/92 Name VERLAW INC Signed [Signature]
(N Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by NA
as Inspector have inspected the pump, or valve, described in this Data Report on Aug 7-92 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date Aug 7-92 Signed [Signature] Commission [Signature]
(Authorized Inspector) (Natl. Bd. (incl. undersigned) and state or prov. and no.)

(1) For manually operated valves only.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 17, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-018
Rts. 2 & 4; Lusby, MD 20657 29205304
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: TWO
4. Identification of System: Startup No.: 061 System Name: Containment Spray
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class 2
(b) Applicable Installation Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class 2
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Modify Anchor 8" HC-33-2005-A2 in accordance with MCR #92-061-011
8. Tests Conducted: Hydrostatic N/A Pressure psi Pneumatic N/A Test Temperature F Nominal Operating Pressure N/A
9. Remarks/Code Cases: Code Case N-408 was invoked, which negated any Section XI Pre-Service NDE.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed [Signature]
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician Date August 17, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 2-18-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature] Commissions NB 8226 AWE MD 647
Inspectors Signature National Board, State, and Endorsements

Date: August 24, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	8"HC33-2005 Anchor A2	N/A	Containment Spray Piping support Anchor	1977	N
Piping System	Replacement	Dubose Nat. Energy	53792-GX Mech No.75505	N/A	3/4" Plate Steel	1992	N
Piping System	Replacement	Dubose Nat. Energy	53792-GX Mech No.75503	N/A	1/2" Plate Steel	1992	N
Piping System	Replacement	Dubose Nat. Energy	53792-GX Mech No.75506	N/A	1" Plate Steel	1992	N
Piping System	Replacement	Dubose Nat. Energy	45273-GX Mech No.96V52	N/A	6" X 6" X 3/8"Tube Steel	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'87 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: July 31, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-023
Rts. 2 & 4; Lusby, MD 20657 29204003
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys ASME Sec. XI Class: Two/MC
5. (a) Applicable Construction Code & Class: ASME Sect III 1977 Ed. thru Winter 79 Add. Class2
(b) Applicable Installation Code & Class: ASME Sect III 1977 Ed. thru Winter 79 Add. Class2
(c) Original Construction/Installation Code & Class: ASME Sect III 1977 Ed. thru Winter 79 Add. Class2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Disassemble and Inspect 2-CV-4071 for preventive maintenance.

8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure N/A
Pressure 810 psi Test Temperature 520°F

9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed joints were performed during the plant conditions listed in block 8 above. The R&R plan was revised using Supplement # 93-20171, which added material to the original Replacement Plan.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon Date July 31, 1993
Owner or Owner's Designee, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 5-24-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspectors Signature National Board, State, and Endorsements

Date: September 1, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Fisher Controls	#8252436	N/A	2-CV-4071, AFW Pp Stm Sup #22 S/G	1980	Y
Valve	Replacement	Fisher Controls	PO #30244-GX #CB4603-1	N/A	Plug/Stem Assembly	1989	Y
Valve	Replacement	Fisher Controls	PO #43937-GX #CA3466-2	N/A	Plug, Primary	1990	Y

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not To Exceed One Day's Production

Pg. 1 of 1

1. Manufactured and certified by Fisher Controls Int'l Inc., 205 S. Center St., Marshalltown, IA 50151
(name and address of NPT Certificate Holder)
2. Manufactured for Baltimore Gas & Electric Co., Box 1535, Baltimore, MD 21203
(name and address of purchaser)
3. Location of installation Calvert Cliffs Nuclear Power Plant, Lusby, MD 20657
(name and address)
4. Type 34A2072 Rev. H SB-156-N06600 80.0 KSI N/A 1991
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III: 1977 Winter 1979 2 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) _____ Revision _____ Date _____
(no.)
7. Remarks: _____

Parts Are For Valve S/N 8252433-36

8. Nom. thickness (in.) _____ Min. design thickness (in.) _____ Dia. ID (ft & in.) _____ Length overall (ft & in.) _____
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order Seat Number
(1) CB4603-1	90418-1
(2) CB4603-2	90418-2
(3) _____	_____
(4) _____	_____
(5) _____	_____
(6) _____	_____
(7) _____	_____
(8) _____	_____
(9) _____	_____
(10) _____	_____
(11) _____	_____
(12) _____	_____
(13) _____	_____
(14) _____	_____
(15) _____	_____
(16) _____	_____
(17) _____	_____
(18) _____	_____
(19) _____	_____
(20) _____	_____
(21) _____	_____
(22) _____	_____
(23) _____	_____
(24) _____	_____
(25) _____	_____

Part or Appurtenance Serial Number	National Board Number in Numerical Order
(26) _____	_____
(27) _____	_____
(28) _____	_____
(29) _____	_____
(30) _____	_____
(31) _____	_____
(32) _____	_____
(33) _____	_____
(34) _____	_____
(35) _____	_____
(36) _____	_____
(37) _____	_____
(38) _____	_____
(39) _____	_____
(40) _____	_____
(41) _____	_____
(42) _____	_____
(43) _____	_____
(44) _____	_____
(45) _____	_____
(46) _____	_____
(47) _____	_____
(48) _____	_____
(49) _____	_____
(50) _____	_____

10. Design pressure 1000 psi. Temp. 580 °F Hydro. test pressure N/A at temp. °F
(when applicable)

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM N-2 (back)

Mfr. Serial No. _____

CERTIFICATION OF DESIGN

Design specifications certified by R. F. Ash P.E. State MD Reg. no. 9198
(when applicable)Design report* certified by _____ P.E. State _____ Reg. no. _____
(when applicable)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Valve Plugs
conforms to the rules of construction of the ASME Code, Section III.NPT Certificate of Authorization No. 1930 Expires 11-18-92Date 2-19-91 Name Fisher Controls Int'l Inc. Signed Daniel L. Bryan
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of
IOWA and employed by Hartford SBI & I Coat Hartford, CONN have inspected these items described in this Data Report on 2-21-91 and state that to the
best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section
III. Each part listed has been authorized for stamping on the date shown above.By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described
in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or
loss of any kind arising from or connected with this inspection.Date 2-21-91 Signed Kent Cocking Commissions 822 IA
(Authorized Inspector) (Nat'l Bd. Incl. endorsements: state or prov. and no.)

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*As Required by the Provisions of the ASME Code, Section III
Not To Exceed One Day's Production

Pg. 1 of 1

1. Manufactured and certified by Fisher Controls Int'l Inc., 205 S. Center St., Marshalltown, IA 50158
(name and address of NPT Certificate Holder)
2. Manufactured for Baltimore Gas & Electric Co., Box 1535, Baltimore, Maryland 21203
(name and address of purchaser)
3. Location of installation Calvert Cliffs Nclr. Pwr. Sta., Lusby, Maryland 20657
(name and address)
4. Type 34A2017 Rev. G SA-479-316L 70.0 KSI N/A 1991
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III: 1977 Winter 1979 2 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) _____ Revision _____ Date _____
(no.)
7. Remarks: _____

Parts Are For Valve S/N 8252433-436

8. Nom. thickness (in.) _____ Min. design thickness (in.) _____ Dia. ID (ft & in.) _____ Length overall (ft & in.) _____
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No.— in Numerical Order Heat Number
(1) CA3466-1	18523-1
(2) CA3466-2	18523-2
(3) CA3466-3	18523-3
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board Number in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 1000 psi. Temp. 580 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/86)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM N-2 (back)

Mfr. Serial No. _____

CERTIFICATION OF DESIGN

Design specifications certified by R.F. Ash P.E. State MD Reg. no. 9198
(when applicable)Design report* certified by _____ P.E. State _____ Reg. no. _____
(when applicable)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Primary Plugs
conforms to the rules of construction of the ASME Code, Section III.NPT Certificate of Authorization No. 1930 Expires 11-18-92Date 7-9-91 Name Fisher Controls Int'l Inc. Signed David L. Buzza
(NPT Certificate Holder) authorized representative

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Iowa and employed by Hartford SBI & I Co
of Hartford, CONN have inspected these items described in this Data Report on July 9, 1991 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 7-9-91 Signed Scott P. Buzza Commissions NB 2522(W)(E)
(Authorized Inspector) (Nat'l. Bd. incl. endorsements)

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 30, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 93-2-032
Rts. 2 & 4; Lusby, MD 20657 29205307
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 061 System Name: Containment Spray ASME Sec. XI Class: Two
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class 2
(b) Applicable Installation Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class 2
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Edition thru 1971 Addenda, Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Modify Anchor 8" HC-33-2005-H1 in accordance with MCR #92-061-013.
8. Tests Conducted: Hydrostatic N/A Pressure psi Pneumatic N/A Test Temperature F Nominal Operating Pressure N/A
9. Remarks/Code Cases: No Section XI Pre-Service NDE was performed per code case N-408.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed [Signature] David W. Bacon Engineering Technician Date August 30, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 2-12-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature] Commissions NB 8226 ANZ MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 31, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	8"HC33-2005 Anchor H1	N/A	Containment Spray Piping support Anchor	1977	N
Piping System	Replacement	Dubose Nat. Energy	53792-GX Mech No.75501	N/A	1/4" Plate Steel	1992	N
Piping System	Replacement	Dubose Nat. Energy	53792-GX Mech No.75503	N/A	1/2" Plate Steel	1992	N
Piping System	Replacement	Dubose Nat. Energy	78876-GX Mech No.96P56	N/A	1" Plate Steel	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 16, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-034
Rts. 2 & 4; Lusby, MD 20657 29206752
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys ASME Sec. XI Class: Two/MC
5. (a) Applicable Construction Code & Class: USAS B31.7 Class One, 1969 Edition thru 71 Addenda
(b) Applicable Installation Code & Class: N/A
(c) Original Construction/Installation Code & Class: USAS B31.7 Class Two, 1969 Edition thru 71 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Fabricate and install 2-SI-215, 225, 235, & 245 temporary pipe restraints to support FCR 89-14.
8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure N/A
Pressure psi Test Temperature F
9. Remarks/Code Cases: A Magnetic Particle Examination of the temporary attachment area was performed following removal of the temporary attachments. The Repair Plan was revised using Supplement No.s 93-20109 & 93-20179.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed [Signature] David W. Bacon Date August 16, 1993
Owner or Owner's Designee, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 2-26-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual System

[Signature] Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 30, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaired	Bechtel	12"CC-4 & 13 & 12" GC-9	N/A	Safety Injection Piping Supports	1977	Y

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 10, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-037
Rts. 2 & 4; Lusby, MD 20657 29205306
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A ASME Sec. XI Class: TWO
4. Identification of System: Startup No.: 061 System Name: Containment Spray sys
5. (a) Applicable Construction Code & Class: ASME Section III, Class 2, 1980 Edition thru W82 Addenda
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 71 Add. Class 2
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 71 Add. Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Remove Snubber HC-33-2001-R17X & HC-33-2001-R37X, and change existing snubber HC-33-2001-R38 to a rigid strut on the Containment Spray Header.
8. Tests Conducted: Hydrostatic N/A Pressure psi Pneumatic N/A Test Temperature F Nominal Operating Pressure N/A
9. Remarks/Code Cases: No Section XI examinations were performed in accordance with Code Case N-408. The replacement plan was revised with Supplement No. 93-20202 for editorial changes.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

David W. Bacon
Owner or Owner's Designee, Title

Engineering Technician

Date August 10, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 2-26-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspector's Signature

Commissions NB 8226 ANI MD 647
National Board, State, and Endorsements

Date: August 16, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Removed Removed Replaced	Bechtel	HC-33-2001-R17X HC-33-2001-R37X HC-33-2001-R38	N/A	Containment Spray Pping Supports	1977	Y
Piping System	Replacement	Grinnell Corporation	PO No.75617-GX S/N 1992-432	N/A	Sway Strut, Frinnell Fig 211N, Size B	1992	Y

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*

As required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

1. Manufactured by Grinnell Corporation - 1341 Elmwood Ave. - Cranston, RI 02910
(name and address of NPT Certificate Holder)
2. Manufactured for Baltimore Gas & Electric Co. - Baltimore, MD 21203
(name and address of Purchaser)
3. Location of Installation Calvert Cliffs Nuclear Station - MD Rts 2 & 4 - Calvert County, Lusby, MD 20657
(name and address)
4. Type: C.S.E. DRS 82, Rev. 7 1992
(describe) (Design Report or Load Capacity Data Sheet) (year built)
5. ASME Code, Section III, Division 1: 1980 Winter, 1982 2 Note 1
(edition) (addenda and date) (class) (Code Case No.)

6. Identification

	(a) Component Support I.D. No.	(b) Material Specification No.	(c) Canadian Registration No.	(d) Applicable Drawings With Last Rev. & Date	(e) National Board No.
(1)	1992-432	Note 2	N/A	SH-1191, Rev. K, 8-28-87	N/A
(2)					
(3)					
(4)					
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

7. Remarks: Notes - 1: N-71 N-247 N-249

2: SA-36, SA-53 GR 8

P.O. #756170X

Item #1

S.O. #41-12218

*Supplemental information in the forms of lists, sketches, or drawings may be used provided (1) size 8 1/2 x 11, (2) information in Items 1 through 4 on this Data Report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 20, 1993
Sheet: 1 of 1
2. Plant/Address Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 93-2-039
Rts. 2 & 4; Lusby, MD 20657 29205516
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys. ASME Sec. XI Class: Two/MC
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace Unit Two's Bottom Blowdown piping with Chrome Molly piping.
8. Tests Conducted: Hydrostatic XX Pneumatic N/A Nominal Operating Pressure N/A
Pressure 1250 psi Test Temperature 72.0 °F
9. Remarks/Code Cases: A VT-2 Visual Examination of the installation welds was performed during the system conditions listed in block 8 above.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI.
repair or replacement

Signed David W. Bacon Date August 20, 1993
Owner or Owner's Designee, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-22-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 3226 ANI MD 647
Inspectors Signature National Board, State, and Endorsements

Date: August 20, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2"EB14-2001	N/A	Steam Generator Blowdown Penetration Piping	1977	Y
Piping System	Replacement	Tioga Pipe Supply Co.	23568-GX Mech No.75W50	N/A	2" Schedule 80 Pipe	1989	N
Piping System	Replacement	Hub Inc.	79217-GX Mech No.Q7342	N/A	2" X 2" X 3/4" Reducing Tee	1993	N
Piping System	Replacement	Tioga Pipe Supply Co.	10322-GX Mech No.75W49	N/A	2" Socket Weld Elbow	1988	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 19, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-040
Rts. 2 & 4; Lusby, MD 20657 29205517
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys. ASME Sec. XI Class: Two/MC
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace Unit Two's Bottom Blowdown piping with Chrome Molly piping.

8. Tests Conducted: Hydrostatic XX Pneumatic N/A Nominal Operating Pressure N/A
Pressure 1250 psi Test Temperature 75.3 °F

9. Remarks/Code Cases: A VT-2 Visual Examination of the installation welds was performed during the system conditions listed in block 8 above

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI.
repair or replacement

Signed

David W. Bacon
Owner or Owner's Designee, Title

Engineering Technician

Date August 19, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-22-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspector's Signature

Commissions NB 8226 ANI MD 647
National Board, State, and Endorsements

Date: August 20, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2"EB14-2002	N/A	Steam Generator Blowdown Penetration Piping	1977	Y
Piping System	Replacement	Hub Inc.	71447-GX Mech No.75W50	N/A	2" Schedule 80 Pipe	1992	N
Piping System	Replacement	Tioga Pipe Supply Co.	23568-GX Mech No.75W50	N/A	2" Schedule 80 Pipe	1989	N
Piping System	Replacement	Dubose National Egy	79217-GX Mech No.Q7342	N/A	2" Socket Weld Coupling	1993	N
Piping System	Replacement	Tioga Pipe Supply Co.	10322-GX Mech No.75W49	N/A	2" Socket Weld Elbow	1988	N
Piping System	Replacement	Dubose Steel Inc.	51320-GX Mech No.75501	N/A	1/4" Plate Steel	1990	N
Piping System	Replacement	Hub Inc.	43220-GX Mech No.88761	N/A	Strap Guide, 1-1/2" PG44	1990	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 17, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-041
Rts. 2 & 4; Lusby, MD 20657 29207173
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: Two/MC
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys.
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace Unit Two's Surface Blowdown piping with Chrome Molly piping.
Valve.
8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XX
Pressure 750 psi Test Temperature 520 °F

9. Remarks/Code Cases: A VT-2 Visual Examination of the downstream welded joints was performed during the system conditions listed in block 8 above in accordance with Code Case N-416. All welds recieved a Section XI surface examination as the Final NDE to satisfy Code Case N-416 requierments.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed [Signature] David W. Bacon
Owner or Owner's Designee, Title Engineering Technician Date August 17, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-22-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature] Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 19, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2"EB14-2004	N/A	Main Steam System Penetration Piping	1977	Y
Piping System	Replacement	Tioga Pipe Supply Co.	23568-GX Mech No.75W50	N/A	2" Schedule 80 Pipe	1993	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: June 18, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 93-2-042
Rts. 2 & 4; Lusby, MD 20657 29205002
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection ASME Sec. XI Class: One
5. (a) Applicable Construction Code & Class: ASME Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 1
(b) Applicable Installation Code & Class: ASME Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 1
(c) Original Construction/Installation Code & Class: ASME Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 1
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace cover threaded fasteners on 2-SI-138.
8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XXX
Pressure 2295 psi Test Temperature 222 °F
9. Remarks/Code Cases: A VT-1 Visual Examination of the existing and replacement threaded fasteners were performed, a VT-2 Visual Examination of the disturbed Body to Bonnet joint was performed during the System Walkdowns prior to plant start-up.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed Robert W. Lawrence Date 7-14, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-15-93 to 6-8-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual System

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspectors Signature National Board, State, and Endorsements

Date: August 11, 1993

FACTORY MUTUAL
ENGINEERING ASSOCIATION

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Velan Eng.	Model No. B14-3114B-13M	N/A	22B Safety Inject. Hdr Check Valve	1977	Y
Valve	Replacement	Velan Eng.	30071-GX Mech No. 59J41	N/A	Nut, 1-1/4"-8 UNC	1982	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 25, 1993
Sheet: 1 of 1

2. Plant/Address Calvert Cliffs Nuclear Power Plant Unit: Two
Rts. 2 & 4; Lusby, MD 20657

NISU Ref. No.: 93-2-043
29200078
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No. N/A
Expiration Date: N/A
ASME Sec. XI Class: Two

4. Identification of System: Startup No.: 083 System Name: Main Steam

5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. thru 72 Add

(b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add

(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Disassemble, inspect and overhaul as necessary, #22 Main Steam Header Atmospheric Dump Valve 2-CV-3938 to correct a seat leakage deficiency. Perform PM 2-83-M-R-8.

8. Tests Conducted: Hydrostatic N/A
Pressure 850 psi

Pneumatic N/A
Test Temperature 520 °F

Nominal Operating Pressure XX.

9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed mechanical joints were performed during the system conditions listed in section 8 above. Resident ANII witnessed Surface exam of the plugs prior to installation.

Applicable Manufacturer's Data Reports to be Attached

Note:

Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

Owner or Owner's Designee, Title

David W. Bacon

Engineering Technician

Date August 25, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected

the components described in this Owners Report during the period 3-27-93 to 8-3-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspector's Signature

Commissions NB 8226 ANI MD 647

National Board, State, and Endorsements

Date: August 25, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Copes-Vulcan Incorporated	0075	N/A	#22 MS Header Atmos Dump Valve, 2CV3938	1977	N
Valve	Replacement	Copes-Vulcan Incorporated	74177-GX Mech No59004	N/A	Main Plug,Ht #32840	1992	N
Valve	Replacement	Copes-Vulcan Incorporated	54198-GX Mech No96185	N/A	Inner Plug,S/N 91-1	1991	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 13, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 93-2-045a
Rts. 2 & 4; Lusby, MD 20657 29206549
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys. ASME Sec. XI Class: Two/MC
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace valve 2-MOV-6611 per MCR 90-01-1056; WPCS #1 due to being internally damaged. Replace with Velan Valve with a 2700 series Anchor/Darling double disc gate Valve.
8. Tests Conducted: Hydrostatic: XX Pneumatic: N/A Nominal Operating Pressure: XX
Pressure: 1500psi Test Temperature: 76 °F

9. Remarks/Code Cases: A VT-2 Visual Examination of the downstream welded joints was performed during the system conditions listed in block 8 above. A VT-2 Visual Examination of the upstream weld joint was performed during normal system operating conditions (850 Lb./542 Deg. F) in accordance with Code Case N-416. The upstream joint also recieved a Section XI Surface Examination IAW CC N-416. The Replacement Plan was revised using Supplement No. 93-20139, which added material to the list of authorized replacements.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: [Signature] David W. Bacon
Owner or Owner's Designee, Title Engineering Technician Date August 13, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-31-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature] Commissions NB 8226 ANI MD 647
Inspectors Signature National Board, State, and Endorsements

Date: August 30, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2"EB12-2024 2MOV6611	N/A	Main Steam Drain System Piping and Drain #5 Iso.	1977	Y
Piping System	Replacement	Anchor Darling Vlv.	52749-GX S/N EB995-1-1	N/A	2" Gate Valve, 1700 Lb. Double-Disc, Socket Weld	1991	Y
Piping System	Replacement	Tioga Pipe Supply Co.	76446-GX Mech No.75991	N/A	2" Schedule 80 Pipe	1992	N
Piping System	Replacement	Hub Inc.	54906-GX Mech No.75852	N/A	2" 90 Deg. Elbow, 3000Lb socket weld	1992	N
Piping System	Replacement	Hub Inc.	44804-GX Mech No.75857	N/A	2" 45 Deg. Elbow, 3000Lb socket weld	1992	N

3/31/1997 09:36:41

USER CONTROLLED

FORM NPV-1 (back)

B. Remarks 2"-2700#-C/S Double Disc Valve for E-B995-12. Design conditions 6564 psi 100 °F or valve pressure class 2700 (1)10. Cold working pressure 6564 psi at 100°F11. Hydrostatic test 10,000 psi. Disk differential test pressure 7330 psi

CERTIFICATION OF DESIGN

Design Specification certified by Tario M. Khan P.E. State Maryland Reg. no. 13776
 Design Report certified by Theron C. Bartlett II P.E. State PA Reg. no. PE-039036-E

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N1712 Expires 4/15/95

Date 8-15-92 Name Anchor/Darling Valve Company Signed Harry D. Larson
 (N Certificate Holder) (Authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State BOARD of Pennsylvania and employed by Commercial Union Ins. Co. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on 3-19 thru 12-21, 1992, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 12-21-92 Signed Charles Young Commission Pennsylvania 2392
 (Inspector) (Natl. Bd. (incl. endorsements) state or prov. and no.)

(1) For manually operated valves only.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 13, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 93-2-045
Rts. 2 & 4; Lushy, MD 20657 29206549
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lushy, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys. ASME Sec. XI Class: TWO
5. (a) Applicable Construction Code & Class: USAS B31.1 1971 Ed. thru 1972 Add.
(b) Applicable Installation Code & Class: USAS B31.1 1971 Ed. thru 1972 Add.
(c) Original Construction/Installation Code & Class: USAS B31.1 1971 Ed. thru 1972 Add.
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace valve 2-MOV-6611 per MCR 90-01-1056; WPCS #1 due to being internally damaged. Replace with Velan Valve with a 2700 series Anchor/Darling double disc gate Valve.
8. Tests Conducted: Hydrostatic: XX Pneumatic: N/A Nominal Operating Pressure: N/A
Pressure: 1500psi Test Temperature: 76 °F

9. Remarks/Code Cases: A VT-2 Visual Examination of the welded joints was performed during the system conditions listed in block 8 above. The upstream joint also recieved a Section XI Surface Examination IAW CC N-416. The Replacement Plan was revised using Supplement No. 93-20144, which added material to the list of authorized replacements.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: [Signature] David W. Bacon
Owner or Owner's Designee, Title Engineering Technician Date: August 13, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-31-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature] Commissions NB 8226 ANE MD 647
Inspectors Signature National Board, State, and Endorsements

Date: August 30, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2"EB12-2041	N/A	Main Steam Drain System Piping and Drain #5	1977	N
Piping System	Replacement	Tioga Pipe Supply Co.	76446-GX Mech No.75991	N/A	2" Schedule 80 Pipe	1992	N
Piping System	Replacement	Hub Inc.	54906-GX Mech No.75852	N/A	2" 90 Deg. Elbow, 3000Lb socket weld	1992	N
Piping System	Replacement	Hub Inc.	44804-GX Mech No.75857	N/A	2" 45 Deg. Elbow, 3000Lb socket weld	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 25, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 93-2-046a
Rts. 2 & 4; Lusby, MD 20657 29206552
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys. ASME Sec. XI Class: Two/MC
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
- (b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
- (c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace valve 2-MOV-6612 per MCR 90-01-1056; WPCS #1 due to being internally damaged. Replace with Velan Valve with a 2700 series Anchor/Darling double disc gate Valve.
8. Tests Conducted: Hydrostatic XX Pneumatic N/A Nominal Operating Pressure XX
Pressure 1500psi Test Temperature 76 °F

9. Remarks/Code Cases: A VT-2 Visual Examination of the downstream welded joints was performed during the system conditions listed in block 8 above. A VT-2 Visual Examination of the upstream weld joint was performed during normal system operating conditions (850 Lb./542 Deg. F) in accordance with Code Case N-416. The upstream joint also recieved a Section XI Surface Examination IAW CC N-416. The Replacement Plan was revised using Supplement No. 93-20140, which added material to the list of authorized replacements.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon Engineering Technician Date August 25, 1993
Owner or Owner's Designer, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-29-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 30, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2"EB12-2030 2MOV6612	N/A	Main Steam Drain System Piping and Drain #6 Iso.	1977	Y
Piping System	Replacement	Anchor Darling Vlv.	52749-GX S/N EB995-1-3	N/A	2" Gate Valve, 1700 Lb. Double-Disc, Socket Weld	1991	Y
Piping System	Replacement	Tioga Pipe Supply Co.	76446-GX Mech No.75991	N/A	2" Schedule 80 Pipe	1992	N
Piping System	Replacement	Hub Inc.	44804-GX Mech No.75857	N/A	2" 45 Deg. Elbow, 3000Lb socket weld	1992	N
Piping System	Replacement	Hub Inc.	54906-GX Mech No.75852	N/A	2" 90 Deg. Elbow, 3000Lb socket weld	1992	N

8. Remarks 2"-2700#-C/S Double Disc Valve for E-8995-18. Design conditions 5018 psi 580 °F or valve pressure class 2700 (1)10. Cold working pressure 6664 psi at 100°F11. Hydrostatic test 10,000 psi. Disk differential test pressure 7330 psi

CERTIFICATION OF DESIGN

Design Specification certified by Tario M. Khan P.E. State Maryland Reg. no. 13776
Design Report certified by Theron C. Bartlett II P.E. State PA Reg. no. PE-039036-E

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N1712 Expires 4/15/95Date 12/15/92 Name Anchor/Darling Valve Company Signed Gary D. Larson
(N Certificate Holder) (Authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State Pennsylvania and employed by Commercial Union Ins. Co. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on 3-14-92 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 12-21-92 Signed Charles H. Young Commissions Pennsylvania 2392
(Inspector) (Natl. Bd. Incl. endorsements: state or prov. and no.)

(1) For manually operated valves only.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 25, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-0456b
Rts. 2 & 4; Lusby, MD 20657 29206552
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: TWO
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys.
5. (a) Applicable Construction Code & Class: USAS B31.1 1971 Ed. thru 1972 Add.
(b) Applicable Installation Code & Class: USAS B31.1 1971 Ed. thru 1972 Add.
(c) Original Construction/Installation Code & Class: USAS B31.1 1971 Ed. thru 1972 Add.
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace valve 2-MOV-6612 per MCR 90-01-1056; WPCS #1 due to being internally damaged. Replace with Velan Valve with a 2700 series Anchor/Darling double disc gate Valve.
8. Tests Conducted: Hydrostatic: XX Pneumatic: N/A Nominal Operating Pressure: N/A
Pressure: 1500 psi Test Temperature: 76 °F
9. Remarks/Code Cases: A VT-2 Visual Examination of the welded joints was performed during the system conditions listed in block 8 above. The Replacement Plan was revised using Supplement No. 93-20143, which added material to the list of authorized replacements.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

[Signature]

Owner or Owner's Designee, Title

David W. Bacon

Engineering Technician

Date August 25, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-30-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspector's Signature

Commissions

NB 8226

AWI

MD 647

National Board, State, and Endorsements

Date: August 30, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2"EB12-2043	N/A	Main Steam Drain System Piping and Drain #6	1977	N
Piping System	Replacement	Tioga Pipe Supply Co.	76446-GX Mech No.75991	N/A	2" Schedule 80 Pipe	1992	N
Piping System	Replacement	Hub Inc.	54906-GX Mech No.75852	N/A	2" 90 Deg. Elbow, 3000Lb socket weld	1992	N
Piping System	Replacement	Hub Inc.	44804-GX Mech No.75857	N/A	2" 45 Deg. Elbow, 3000Lb socket weld	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 13, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO
Rts. 2 & 4; Lusby, MD 20657

NISU Ref. No.: 93-2-047
29103755
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A

4. Identification of System: Startup No.: 083 System Name: Main Steam Sys.

ASME Sec. XI Class: TWO

5. (a) Applicable Construction Code & Class: USAS B31.1 1971 Ed. thru 1972 Add.

(b) Applicable Installation Code & Class: USAS B31.1 1971 Ed. thru 1972 Add.

(c) Original Construction/Installation Code & Class: USAS B31.1 1971 Ed. thru 1972 Add.

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Replace a section of #22 Steam Generator Surface Blowdown piping due to external corrosion which has caused the wall thickness to near min wall criteria.

8. Tests Conducted: Hydrostatic N/A Pressure 750 psi Pneumatic N/A Test Temperature 520 °F Nominal Operating Pressure XX

9. Remarks/Code Cases: A VT-2 Visual Examination of the welded joints was performed during the system conditions listed in block 8 above in accordance with Code Case N-416. The welded joints also recieved a Section XI Surface Examination IAW CC N-416. The Replacement Plan was revised using Supplement No. 93-20129 and 93-20130, which added material to the list of authorized replacements.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon Engineering Technician Date August 13, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-22-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date September 3, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2" EB6-2016	N/A	Main Steam Surface Blow Down Piping from #22 S/G	1977	N
Piping System	Replacement	Hub Inc.	57357-GX Mech No.75991	N/A	2" Schedule 80 Pipe	1992	N
Piping System	Replacement	Grinnell Corporation	59861-GX Mech No.78450	N/A	U-Bolt, Grinnell Fig. 137N, Complete W/Nuts	1992	N
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.NX063	N/A	Bolt, Heavy Hex, 1/2" X 13TPI SA-193 Gr 7	1991	N
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX 48242-GX Mech No.75P05	N/A N/A	Nut, Heavy Hex, 1/2" X 13TPI SA-194 Gr 2H	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475, Baltimore, MD 21203 Date: September 2, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-048
Rts. 2 & 4, Lusby, MD 20657 29005281
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4, Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A ASME Sec. XI Class: TWO
4. Identification of System: Startup No.: 061 System Name: Containment Spray Sys.
5. (a) Applicable Construction Code & Class: ASME Section III, Class One, 1983 Edition thru S84 Add.
(b) Applicable Installation Code & Class: USAS B31.7 1960 Edition thru 1971 Add. Class 2.
(c) Original Construction/Installation Code & Class: ASME Section III & VIII of the B&PV Code and USAS B31.1.0
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Overhaul No. 21 Containment Spray Pump. Replace the Pumps horizontal casing bolting due to damage incurred during disassembly or due to missing code material markings.

8. Tests Conducted: Hydrostatic: N/A Pneumatic: N/A Nominal Operating Pressure: XX
Pressure: 150 psi Test Temperature: 300 °F

9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above. The replacement plan was revised by supplement number

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: [Signature] David W. Bacon
Owner or Owner's Designee, Title Engineering Technician Date: September 2, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-16-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature] Commissions NB 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: September 2, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Pump	Replaced	Byron Jackson Pump	N/A	N/A	#21 Containment Spray Pump, 2PUMPSIC21	1977	N
Pump	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P27	N/A	Rod, Allthread, 7/8" X 9TPI SA-193 GrB7	1992	N
Pump	Replacement	Cardinal Ind Products	PO #36481-GX Mech No.75P08	N/A	Nut, Heavy Hex, 7/8" X 9TPI SA-194 Gr2H	1989	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475, Baltimore, MD 21203 Date: August 16, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-049
Rts. 2 & 4, Lusby, MD 20657 29005283
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4, Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 061 System Name: Containment Spray Sys ASME Sec. XI Class: TWO
5. (a) Applicable Construction Code & Class: ASME Section III, Class One, 1983 Edition thru S84 Add
(b) Applicable Installation Code & Class: USAS B31.7 1969 Edition thru 1971 Add, Class 2
(c) Original Construction/Installation Code & Class: ASME Section III & VIII of the B&PV Code and USAS B31.1.0
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Overhaul No. 22 Containment Spray Pump. Replace the Pumps horizontal casing bolting due to damage incurred during disassembly or due to missing code material markings.
8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XX
Pressure 150 psi Test Temperature 300 °F
9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above. The replacement plan was revised by supplement number

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon Date August 16, 1993
Owner or Owner's Designee, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-16-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert L. Tansler
Inspector's Signature

Commissions NB B226 ANT MD 647
National Board, State, and Endorsements

Date: August 25, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Pump	Replaced	Byron Jackson Pump	691N0025	N/A	#22 Containment Spray Pump, 2PUMPSIC22	1977	N
Pump	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P27	N/A	Rod, Allthread, 7/8" X 9TPI SA-193 GrB7	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., 5'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 6, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657 Unit: Two

NISU Ref. No.: 93-2-052
29300689
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE

Authorization No.: N/A

Expiration Date: N/A

ASME Sec. XI Class: One

4. Identification of System: Startup No.: 064 System Name: Reactor Coolant Sys.

5. (a) Applicable Construction Code & Class: ASME Section III, Class One 1968 Edition, thru Winter 68 Add.

(b) Applicable Installation Code & Class: N/A

(c) Original Construction/Installation Code & Class: ASME Section III, Class One 1968 Edition, thru Winter 68 Add.

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Replace 1/2" safety relief valve seat drain to 2-RV-200.

8. Tests Conducted: Hydrostatic: N/A
Pressure: 2295 psi

Pneumatic: N/A Nominal Operating Pressure: XX
Test Temperature: 532 °F

9. Remarks/Code Cases: A Section XI VT-2 Visual Examination of the attachment weld to 2-RV-200 was performed following repairs during the system conditions listed in Block 8 above. (Mode 1 conditions)

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: David W. Bacon Date: August 6, 1993
Owner or Owner's Designee, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-27-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert C. Lawrence
Inspector's Signature

Commissions NB 8226 ANI MD 647

National Board, State, and Endorsements

Date: August 25, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Repaired	Dresser Indus. Valve	BV-02950 Tag No. RC200	N/A	Pressurizer Steam Safety Relief Valve	1982	Y

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 20, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 93-2-058
Rts. 2 & 4; Lusby, MD 20657 29201670
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys ASME Sec. XI Class: One
5. (a) Applicable Construction Code & Class: Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 1
(b) Applicable Installation Code & Class: Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 1
(c) Original Construction/Installation Code & Class: Draft Pump & Valve Code 1968 Ed. thru March 1970 Add. Class 1
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Seal weld a Non-Section XI leak-off line to the valve body of 2-MOV-652 in accordance with MCR 90-01-64.
8. Tests Conducted: Hydrostatic: N/A Pneumatic: N/A Nominal Operating Pressure: XX
Pressure: 2295 psi Test Temperature: 530 °F
9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above. Note that the Draft Pump & Valve code refers welding activities to the B31.7 Construction Code which is listed on the WAT as the repair/installation code.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: [Signature] David W. Bacon
Owner or Owner's Designee, Title Engineering Technician Date August 20, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 3-22-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature] Commissions NB 5226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: August 24, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Repaired	Velan Engineering	Not Available	N/A	Shutdown Cooling Return Isolation MOV, 2MOV652	1977	Y

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
Date: August 6, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657
Unit: TWO
NISU Ref. No.: 93-2-061
29104841
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657
Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: One
4. Identification of System: Startup No.: 064 System Name: Reactor Coolant Sys
5. (a) Applicable Construction Code & Class: ASME Sect. III 1965 Ed. thru W67 Add., Class A
(b) Applicable Installation Code & Class: ASME Sect. III 1965 Ed. thru W67 Add., Class A
(c) Original Construction/Installation Code & Class: ASME Sect. III 1965 Ed. thru W67 Add., Class A
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Remove and reinstall #21 Pressurizer Manway cover to support Refueling outage. Replace threaded fasteners damaged during disassembly or those lacking proper code material markings.

8. Tests Conducted: Hydrostatic N/A Pressure 2295 psi
Pneumatic N/A Test Temperature 532 F
Nominal Operating Pressure XX

9. Remarks/Code Cases: A VT-2 examination of the disturbed mechanical joint was performed during the system conditions listed in block 8 above. A VT-1 Visual Examination of existing and replacement fasteners was performed prior to reinstallation of the Manway Cover.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: David W. Bacon Engineering Technician Date: August 6, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-14-93 to 6-6-93 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 AWE MD 647
Inspector's Signature National Board, State, and Endorsements

Date: September 3, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Vessel	Replaced	Combustion Engineering	CE 67603	20916	#21-Pressurizer, 2PZVPZR21	1972	Y
Vessel	Replacement	ABB Cumbst. Engineering	77668-GX Mech No.91021	N/A	Stud, Manway for Pzr 1-1/2"-8N, SA-540 Gr.B24	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 23, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO
1650 Calvert Cliffs Parkway; Lusby, Md. 20657

NISU Ref. No.: 92-2-061#
29105118
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A

4. Identification of System: Startup No.: 061 System Name: Containment Spray Sys ASME Sec. XI Class: TWO

5. (a) Applicable Construction Code & Class: ASME B & PV Code Section III, 1968 Edition Class C.

(b) Applicable Installation Code & Class: ASME B & PV Code Section III, 1968 Edition Class C.

(c) Original Construction/Installation Code & Class: ASME B & PV Code Section III, 1968 Edition Class C.

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Modify #21 Shut Down Heat Exchanger in accordance with FCR 91-271. (Install helical spacers to reduce tube vibrations.) Replace threaded fasteners damaged during disassembly or which do not exhibit the proper code material markings.

8. Tests Conducted: Hydrostatic N/A Pressure 150/65 psi Pneumatic N/A Nominal Operating Pressure XX Test Temperature 300/167 °F

9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above. Note the pressure temperatures listed are primary/secondary respectfully.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: David W. Bacon Engineering Technician Date: August 23, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 1-14-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 5226 ANE MD 647
Inspector's Signature National Board, State, and Endorsements

Date: September 2, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Pressure Vessel	Replaced	Engineers & Fabricators	S-15784-B	#1146	#21 Shutdown Cooling Ht Exchanger, 2HXSICS21	1969	Y
Pressure Vessel	Replacement	Cardinal Ind. Product	57533-GX Mech No.75P16	N/A	Nut, Heavy Hex, 3/4" X 10TPI SA-194 Gr2H	1992	N
Pressure Vessel	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P26	N/A	Rod, Allthread, 3/4" X 10TPI SA-193 GrB7	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 23, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 92-2-061b
1650 Calvert Cliffs Parkway; Lusby, Md. 20657 29105118
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 061 System Name: Containment Spray Sys ASME Sec. XI Class: TWO
5. (a) Applicable Construction Code & Class: ASME B & PV Code Section III, 1968 Edition Class C
(b) Applicable Installation Code & Class: ASME B & PV Code Section III, 1968 Edition Class C
(c) Original Construction/Installation Code & Class: ASME B & PV Code Section III, 1968 Edition Class C
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Modify #22 Shut Down Heat Exchanger in accordance with FCR 91-271. (Install helical spacers to reduce tube vibrations.) Replace threaded fasteners damaged during disassembly or which do not exhibit the proper code material markings.
8. Tests Conducted: Hydrostatic: N/A Pneumatic: N/A Nominal Operating Pressure: XX
Pressure: 150/65 psi Test Temperature: 300/167 °F
9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above. Note the pressure temperatures listed are primary/secondary respectfully.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: [Signature] David W. Bacon
Owner or Owner's Designee, Title Engineering Technician Date August 23, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 1-14-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature] Commissions NB 8226 AWE MD 647
Inspectors Signature National Board, State, and Endorsements

Date: September 2, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Pressure Vessel	Replaced	Engineers & Fabricators	S-15783-B	#1144	#22 Shutdown Cooling Ht Exchanger, 2HXSICS22	1969	Y
Pressure Vessel	Replacement	Cardinal Ind. Product	57533-GX Mech No.75P16	N/A	Nut, Heavy Hex, 3/4" X 10TPI SA-194 Gr2H	1992	N
Pressure Vessel	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P26	N/A	Rod, Allthread, 3/4" X 10TPI SA-193 GrB7	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: June 18, 1993
 Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-069
Rts. 2 & 4; Lusby, MD 20657 29202943
 P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
 Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection ASME Sec. XI Class: Two
5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. thru 1972 Add. Code Case N-10
 (b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. thru 1972 Add. Code Case N-10
 (c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. thru 1972 Add. Code Case N-10

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Overhaul 2-MOV-617, replacing the Disc with a new stronger Disc.

8. Tests Conducted: Hydrostatic N/A Pressure 2235 psi Pneumatic N/A Test Temperature 120°F Nominal Operating Pressure XX.

9. Remarks/Code Cases: A VT-2 Visual Examination was performed on the disturbed joint at the system conditions listed in block 8 above. The disc replacement is in response to the NRC Generic Letter 89-10.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI, repair or replacement

Signed Roger Cantrell / Simon Engman Date 7-14, 1993
 Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-13-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual System

Robert W. Lawrence Commissions NE 8226 ANI MD 647
 Inspector's Signature National Board, State, and Endorsements

Date: August 30, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Velan Eng.	2-MOV-617 S/N 123201	N/A	#21 Auxiliary HPSI Loop Isolation Motor Op. Valve	1977	N
Valve	Replacement	Velan Eng. Company	77419-GX S/N 527-5	N/A	Valve Disc for 2 in. 1500 Lb. Globe Valve.	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: September 3, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 93-2-075
Rts. 2 & 4; Lusby, MD 20657 29201730
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657 Type Code Symbol Stamp: NONE
Authorization No. N/A
Expiration Date: N/A
ASME Sec. XI Class: Two/MC
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys
5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. thru 1972 Add.
(b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. thru 1972 Add.
(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. thru 1972 Add.
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Overhaul 2-CV-3939 to correct seat leak deficiency.
8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XXX
Pressure 800psi Test Temperature 532°F
9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed mechanical joints were performed during the plant conditions listed in block 8.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

Owner or Owner's Designee, Title

S. F. Wolf
Maintenance Engineer

Date September 3, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-14-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual System

Inspector's Signature

Commissions NB 8226 AUI MD 647

National Board, State, and Endorsements

Date: September 3 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Copes Vulcan	Not Available	N/A	2-CV-3939, Steam Gen. Atmospheric Dump Valve	1975	N
Valve	Replacement	Copes Vulcan	PO #24165-GX # 11009	N/A	Inner Plug	1989	N
Valve	Replacement	Copes Vulcan	PO# 32701-GX	N/A	Main Plug	1989	N
Valve	Replacement	Cardinal Ind. Products	PO# 57533-GX	N/A	Rod, Allthread, 1"-8TPI	1992	N
Valve	Replacement	Cardinal Ind. Products	PO# 57533-GX	N/A	Nut, Heavy Hex, 1"-8TPI	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
Date: August 13, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657
Unit: TWO
NISU Ref. No.: 93-2-092
29302414
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657
Type Code Symbol Stamp: NONE
Authorization No: N/A
Expiration Date: N/A
ASME Sec. XI Class: TWO

4. Identification of System: Startup No.: 041 System Name: Chemical Volume Cont.

5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class 2
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class 2
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class 2

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Replace 2-CVC-184 due to washing out of disc guide area.

8. Tests Conducted: Hydrostatic XX Pressure 3500 psi
Pneumatic N/A Test Temperature 81 °F
Nominal Operating Pressure XX

9. Remarks/Code Cases: A VT-2 Visual Examination of the welded joints was performed during the system conditions listed in block 8 above; a VT-2 Visual Examination of the disturbed mechanical valve body to bonnet joint was performed during the system normal operating pressure and temperature condition. The replacement plan was revised by supplement number 93-20164 which documented the replacement valve's suitability prior to placing the valve into service.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI.

Signed David W. Bacon Engineering Technician Date August 13, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 5-5-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 ANI MD 647
Inspectors/Signature National Board, State, and Endorsements

Date: September 2, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	2" CC7-2003 & 2-CVC-184	N/A	Charging Pump Discharge to, Cont. Valves DS RegHx	1977	Y
Piping System	Replaced	Velan Engineering	6750-M-5733 Mech No.88417	N/A	2" Check Valve S/N 4488	1977	N
Piping System	Replacement	Velan Engineering	6750-M-5733 Mech No.88417	N/A	2" Check Valve S/N 4317	1977	N
Piping System	Replacement	Dubose Steel Inc.	52818-GX Mech No.75635	N/A	2" Schedule 80 Pipe	1991	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'33 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475, Baltimore, MD 21203

Date: August 6, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4, Lusby, MD 20657 Unit: TWO

NISU Ref. No.: 93-2-080
29301868
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4, Lusby, MD 20657

Type Code Symbol Stamp: NONE
Authorization No. N/A
Expiration Date: N/A

4. Identification of System: Startup No.: 064 System Name: Reactor Coolant Sys.

ASME Sec. XI Class: One

5. (a) Applicable Construction Code & Class: ASME Section III, Class One 1980 Edition, thru Winter 80 Add.

(b) Applicable Installation Code & Class: N/A

(c) Original Construction/Installation Code & Class: ASME Section III, Class One 1965 Edition

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Repair #13 Reactor Vessel Level Monitoring System (RVLMS) Control Element Drive Motor (CEDM) pressure housing Omega Seal Weld boric acid leak.

8. Tests Conducted: Hydrostatic N/A Pressure 2295 psi
Pneumatic N/A Test Temperature 532 °F
Nominal Operating Pressure XX

9. Remarks/Code Cases: A Section XI VT-2 Visual Examination of the omega Seal Weld was performed following repairs during the system conditions listed in Block 8 above.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician

Date August 6, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-22-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert D. Lawrence
Inspectors Signature

Commissions NE 8226 ANI MD 647
National Board, State, and Endorsements

Date: August 31, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Vessel	Repaired	Combustion Engineering	CE 7208	20911	Unit Two Reactor Vessel Head	1971	Y

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 19, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-081
Rts. 2 & 4; Lusby, MD 20657 29207294
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A

4. Identification of System: Startup No.: 064 System Name: Reactor Coolant Sys ASME Sec. XI Class: One

5. (a) Applicable Construction Code & Class: ASME Section III Class One, 1965 Ed. thru Winter 67 Add.
(b) Applicable Installation Code & Class: ASME Section III Class One, 1965 Ed. thru Winter 67 Add.
(c) Original Construction/Installation Code & Class: ASME Section III Class One, 1965 Ed. thru Winter 67 Add.

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Replace In Core Instrumentation (ICI) Blind Seal Plugs and threaded fasteners. The Seal Plugs were installed due to obstructions in the Reactor Vessel which prevented the reinstallation of the In CCI Wires. The threaded fasteners were replaced due to Boric Acid buildup and subsequent corrosion.

8. Tests Conducted: Hydrostatic: N/A Pressure: 2295 psi Pneumatic: N/A Test Temperature: 532 °F Nominal Operating Pressure: XX

9. Remarks/Code Cases: A VT-1 Visual Examination of the replacement threaded fasteners was performed prior to installation. A VT-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above. The replacement plan was revised by supplement number 93-20169 which added to the list of authorized replacement items.

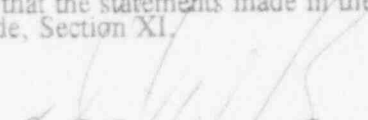
Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed


Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician

Date: August 19, 1993


Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-29-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association


Inspector's Signature

Commissions: NB 8226 AWE MD 647
National Board, State, and Endorsements

Date: September 3, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Vessel	Replaced	Combustion Engineering	CE67108 (Ves) CE67208 (Hd)	N/A	Unit Two Reactor Vessel	1971	Y
Vessel	Replacement	Dubose Steel Inc.	33185-GX Mech No.59M42	N/A	ICI Blind Seal Plugs ref MWO No. 200-354-641	1991	N
Vessel	Replacement	A & G Engineering	00333-GX Mech No.59B06	N/A	ICI Flange Stud	1987	N
Vessel	Replacement	Nova Mach. Products	82949-GX Mech No.59B06	N/A	ICI Flange Stud	1993	N
Vessel	Replacement	Combustion Engineering	21836-GX Mech No.88952	N/A	Nut, Heavy Hex	1989	N
Vessel	Replacement	Nova Mach. Products	82949-GX Mech No.88952	N/A	Nut, Heavy Hex	1993	N
Vessel	Replacement	ABB Comb. Engineering	21836-GX Mech No.75R28	N/A	Nut Drive, ICI Assembly	1991	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475, Baltimore, MD 21203 Date: July 31, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-083
Rts. 2 & 4; Lusby, MD 20657 29104834
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A ASME Sec. XI Class: 1
4. Identification of System: Startup No.: 064 System Name: Reactor Coolant System
5. (a) Applicable Construction Code & Class: B&PV CODE SECT. III65 ED THRU WINTER 67 ADD
(b) Applicable Installation Code & Class: B&PV CODE SECT. III65 ED THRU WINTER 67 ADD
(c) Original Construction/Installation Code & Class: B&PV CODE SECT. III65 ED THRU WINTER 67 ADD
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: This was for the replacement of the bolting on #21 Steam Generator Primary Manway.
The original bolting was not properly marked with the correct traceable markings. No code failure existed.
8. Tests Conducted: Hydrostatic N/A Pressure 2795 psi Pneumatic N/A Test Temperature 532 °F Nominal Operating Pressure: XXX
9. Remarks/Code Cases: A VT-1 Visual Examination was performed on the bolting prior to installation. A VT-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: David W. Bacon Date: July 31, 1993
Owner or Owner's Designer, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-29-93 to 6-8-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

William R. Rogers Commissions NB 7980 MD 952 NISBIS
Inspector's Signature National Board, State, and Endorsements

Date: Aug. 5 1993

2. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Pressure Vessel	Replaced	Combustion Engineering	CE67506	20924	#21 Steam Generator	1969	Y
Pressure Vessel	Replacement	Combustion Engineering	PO# 19812GX	N/A	1 1/2" Nuts ASME SA194 Gr7	1988	N
Pressure Vessel	Replacement	Combustion Engineering	PO# 82243GX	N/A	1 1/2" Studs ASME SA193 B24	1993	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
Date: July 26, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Pis. 2 & 4; Lushy, MD 20657
Unit: TWO
NISU Ref. No.: 93-2-084
29104884
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Pis. 2 & 4; Lushy, MD 20657
Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: 1

4. Identification of System: Startup No. 064 System Name: Reactor Coolant System
ASME Sec. XI Class: 1

5. (a) Applicable Construction Code & Class: B&PV CODE SECT. III65 ED THRU WINTER 67 ADD

(b) Applicable Installation Code & Class: B&PV CODE SECT. III65 ED THRU WINTER 67 ADD

(c) Original Construction/Installation Code & Class: B&PV CODE SECT. III65 ED THRU WINTER 67 ADD

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: This was for the replacement of the bolting on #22 steam Generator Primary Manway. The original bolting was not properly marked with the correct traceable markings. No code failure existed.

8. Tests Conducted: Hydrostatic: N/A Pressure: 2995 psi
Pneumatic: N/A Test Temperature: 532°F
Nominal Operating Pressure: XXX

9. Remarks/Code Cases: A VT-1 Visual Examination was performed on the bolting prior to installation. A VT-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above.


Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed



Owner or Owner's Designee, Title

EN. HNEER

Date 7/26, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 4-29-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures describe in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association


Inspectors Signature

Commissions NB 8226 ANI MD 647

National Board, State, and Endorsements

Date: August 16, 1993

2. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Pressure Vessel	Replaced	Combustion Engineering	CE67507	20925	#22 steam Generator	1971	Y
Pressure Vessel	Replacement	Combustion Engineering	PO# 19812EX M 7/24/93	N/A	1 1/2" Nuts ASME SA194 Gr7	1988	N
Pressure Vessel	Replacement	Combustion Engineering	PO# 82243GX	N/A	1 1/2" Studs ASME SA193 B24	1993	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 16, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-090
Rts. 2 & 4; Lusby, MD 20657 29103570
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: 2
4. Identification of System: Startup No.: 083 System Name: Main Steam System
5. (a) Applicable Construction Code & Class: B&PV CODE SECT. III65 ED THRU WINTER 67 ADD
(b) Applicable Installation Code & Class: B&PV CODE SECT. III65 ED THRU WINTER 67 ADD
(c) Original Construction/Installation Code & Class: B&PV CODE SECT. III65 ED THRU WINTER 67 ADD
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Remove and reinstall 21 Steam Generator Secondary Manway Covers. Replace threaded fasteners not exhibiting the proper code material identification numbers.
8. Tests Conducted: Hydrostatic N/A Pressure 810 psi Pneumatic N/A Nominal Operating Pressure XXX
Test Temperature 520°F
9. Remarks/Code Cases: A VI-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above. The replacement plan was revised using supplement no. 93-20161 which added material to the list of authorized replacement items.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed David W. Bacon Date August 16, 1993
Owner or Owner's Designee, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components described in this Owners Report during the period 5-5-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NE 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: September 2, 1993

2. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Pressure Vessel	Replaced	Combustion Engineering	CE67506	20924	#21 Steam Generator	1969	Y
Pressure Vessel	Replacement	Cardinal Ind. Products	PO# 57533GX	N/A	Rod, Allthread ASME SA193 B7	1992	N
Pressure Vessel	Replacement	Combustion Engineering	PO# 56729GX	N/A	Nut, Heavy Hex ASME SA194 Gr7	1991	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 7, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-091
Rts. 2 & 4; Lushy, MD 20657 29103569
P.O.No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lushy, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 083 System Name: Main Steam System ASME Sec. XI Class: 2
5. (a) Applicable Construction Code & Class: B&PV CODE SECT. III, 1965 ED THRU WINTER 67 ADD
(b) Applicable Installation Code & Class: B&PV CODE SECT. III, 1965 ED THRU WINTER 67 ADD
(c) Original Construction/Installation Code & Class: B&PV CODE SECT. III, 1965 ED THRU WINTER 67 ADD
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Remove and reinstall 22 Steam Generator Secondary Manway Covers. Replace threaded fasteners not exhibiting the proper code material identification markings.

8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure XXX
Pressure 810 psi Test Temperature 520° F

9. Remarks/Code Cases: A VT-1 Visual Examination was performed on the bolting prior to installation. A VT-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed

[Signature]
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician

Date August 7, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 5-5-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature]
Inspector's Signature

Commissions NB 5226 ANI

MD 647

National Board, State, and Endorsements

Date: August 13, 1993

2. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacturer	MFG's Serial No.	National Board No.	Other Identification	Year Built	ASME Code Stamped Y or N
Pressure Vessel	Replaced	Combustion Engineering	CE67507	20925	#22 Steam Generator	1971	Y
Pressure Vessel	Replacement	Cardinal Ind. Products	PO# 57533GX	N/A	Rod, Allthread ASME SA193 B7	1992	N
Pressure Vessel	Replacement	Combustion Engineering	PO# 56729GX	N/A	Nut, Heavy Hex ASME SA194 Gr7	1991	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 6, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 93-2-092b
Rts. 2 & 4; Lusby, MD 20657 29302414
F.O.No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 041 System Name: Chemical Volume Cont. ASME Sec. XI Class: Two
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class 2
(b) Applicable Installation Code & Class: N/A
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class 2
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Remove and reinstal as interference the indicated piping support to allow replacement of 2-CVC-184.
8. Tests Conducted: Hydrostatic N/A Pneumatic N/A Nominal Operating Pressure N/A
Pressure psi Test Temperature F
9. Remarks/Code Cases:

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed [Signature] David W. Bacon
Owner or Owner's Designee, Title Engineering Technician Date August 6, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 5-5-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature] Commissions NE 8226 ANI MD 647
Inspector's Signature National Board, State, and Endorsements

Date: September 2, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Repaired	Bechtel	2" CC7-2003 -PS-803	N/A	Charg. Pp Disch. to Cont Valves DS Reg. Hx Suppt.	1977	Y

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: August 25, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO
Rts. 2 & 4; Lusby, MD 20657

NISU Ref. No.: 93-2-096
29302407
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE

Authorization No.: N/A

Expiration Date: N/A

ASME Sec. XI Class: TWO/MC

4. Identification of System: Startup No.: 083 System Name: Main Steam Sys.

5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two

(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two

(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Replace the Main Steam Drain System Drain Pot which is listed on page 2. Replacement is required due to minimum wall criteria being calculated as being met/exceeded during the next cycle.

8. Tests Conducted: Hydrostatic N/A Pressure 750psi Pneumatic N/A Nominal Operating Pressure XX
Test Temperature 520°F

9. Remarks/Code Cases: A VT-2 Visual Examinations of the installation joints were performed during the system conditions listed in block 8 above in accordance with Code Case N-416. All welds recieved a Section XI surface examination as the Final NDE to satisfy Code Case N-416 requierments. Baseline UT measurements were attained prior to placing the component in service.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Signed: [Signature]
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician Date August 25, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 5-13-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

[Signature]
Inspector's Signature

Commissions NB 8226 ANT MD 647

National Board, State, and Endorsements

Date: August 25, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	4"EB12-2029	N/A	Main Steam Ppg Between Lihér Plate & Iso Valves	1977	Y
Piping System	Replacement	Hub Inc.	83936-GX Mech No.Q7684	N/A	4" Schedule 40 Pipe	1993	N
Piping System	Replacement	Hub Inc.	83936-GX Mech No.Q7685	N/A	4" Schedule 40 Pipe Cap	1993	N
Piping System	Replacement	Tioga Pipe Supply	26847-GX Mech No.88011	N/A	2" Half Coupling, 3000#	1989	N
Piping System	Replacement	Dubose Nat. Energy Serv.	54906-GX Mech No.88010	N/A	1-1/2" Half Coupling 3000# SW	1993	N
Piping System	Replacement	Tioga Pipe Supply	26746-GX Mech No.88008	N/A	1" Half Coupling, 3000#	1989	N
Piping System	Replacement	Dubose Nat. Energy Serv.	54906-GX Mech No.88007	N/A	3/4" Half Coupling 3000# SW	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two
Rts. 2 & 4; Lusby, MD 20657
3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys.
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace the Main Steam Drain System Drain Pot support threaded fasteners.
8. Tests Conducted: Hydrostatic N/A Pressure psi Pneumatic N/A Test Temperature °F Nominal Operating Pressure N/A
9. Remarks/Code Cases: None.

Date: August 25, 1993
Sheet: 1 of 1

NISU Ref. No.: 93-2-096h
29302407
P.O. No., MWO No.

Type Code Symbol Stamp: NONE
Authorization No.: N/A
Expiration Date: N/A
ASME Sec. XI Class: Two/MC

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI, repair or replacement

Signed David W. Bacon Date August 25, 1993
Owner or Owner's Designee, Title Engineering Technician

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 5-27-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 AND MD 647
Inspectors Signature National Board, State, and Endorsements

Date: August 25, 1993

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 25, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: Two NISU Ref. No.: 93-2-096b
Rts. 2 & 4; Lusby, MD 20657 29302407
P.O. No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No. N/A
Expiration Date: N/A
ASME Sec. XI Class: Two/MC
4. Identification of System: Startup No.: 083 System Name: Main Steam Sys.
5. (a) Applicable Construction Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(b) Applicable Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
(c) Original Construction/Installation Code & Class: USAS B31.7 1969 Ed. thru 1971 Add. Class Two
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Replace the Main Steam Drain System Drain Pot support threaded fasteners.
8. Tests Conducted: Hydrostatic N/A Pressure psi Pneumatic N/A Test Temperature F Nominal Operating Pressure N/A
9. Remarks/Code Cases: None.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI, repair or replacement

Signed

Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician

Date August 25, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 5-27-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Inspector's Signature

Commissions NB 8226 ANI

MD 647

National Board, State, and Endorsements

Date: August 25, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	4"EB12-2029	N/A	Main Steam Ppg Between Liner Plate & Iso Valves	1977	Y
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P05	N/A	Nut, Heavy Hex, 1/2" X 13TPI SA-194 Gr 2H	1992	N
Piping System	Replacement	Cardinal Ind Products	PO #57533-GX Mech No.75P23	N/A	Rod, Allthread, 1/2" X 13TPI SA-193 Gr B7	1992	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203

Date: June 18, 1993
Sheet: 1 of 1

2. Plant/Address: Calvert Cliffs Nuclear Power Plant
Rts. 2 & 4; Lusby, MD 20657 Unit: Two

NISU Ref. No.: 93-2-007
29302857
P.O. No., MWO No.

3. Work Performed by: Baltimore Gas & Electric Company
Rts. 2 & 4; Lusby, MD 20657

Type Code Symbol Stamp: NONE

4. Identification of System: Startup No.: 041 System Name: Charging System

Authorization No.: N/A

Expiration Date: N/A

ASME Sec. XI Class: Two

5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. thru 72 Add

(b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add

(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. thru 72 Add

6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.

7. Description of Work: Re-rate #21 & #22 Boric Acid Pump discharge lines.

8. Tests Conducted: Hydrostatic XXX Pressure 225 psi Pneumatic N/A Test Temperature 81.7 °F Nominal Operating Pressure N/A

9. Remarks/Code Cases: A VT-2 Visual Examination was performed during the system conditions listed in block 8 above. The Increase of the design pressure was performed in accordance with MCR-93-041-011.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI.

Signed Robert W. Lawrence Date 7-14, 1993
Owner or Owner's Designee, Title

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components described in this Owners Report during the period 5-28-93 to 5-30-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence Commissions NB 8226 AWC MD 647
Inspectors Signature National Board, State, and Endorsements

Date: August 11, 1993

FACTORY MUTUAL
ENGINEERING ASSOCIATION

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Piping System	Replaced	Bechtel	HC-7	N/A	Boric Acid Pump Discharge to Charging System	1977	N

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI, 1983 ED., S'83 ADD

1. Owner/Address: Baltimore Gas & Electric Company
P.O. Box 1475; Baltimore, MD 21203 Date: August 19, 1993
Sheet: 1 of 1
2. Plant/Address: Calvert Cliffs Nuclear Power Plant Unit: TWO NISU Ref. No.: 93-2-100
Rts. 2 & 4; Lusby, MD 20657 29302886
P.O.No., MWO No.
3. Work Performed by: Baltimore Gas & Electric Company Type Code Symbol Stamp: NONE
Rts. 2 & 4; Lusby, MD 20657 Authorization No.: N/A
Expiration Date: N/A
4. Identification of System: Startup No.: 052 System Name: Safety Injection Sys ASME Sec. XI Class: TWO
5. (a) Applicable Construction Code & Class: USAS B31.1 1967 Ed. No Add. Code Case N-10
(b) Applicable Installation Code & Class: USAS B31.1 1967 Ed. No Add. Code Case N-10
(c) Original Construction/Installation Code & Class: USAS B31.1 1967 Ed. No Add. Code Case N-10
6. Identification of Components Repaired or Replaced and Replacement Components: See Reverse of this Form.
7. Description of Work: Open and inspect 2-SI-427 to investigate and correct a leak-by deficiency.
8. Tests Conducted: Hydrostatic N/A Pressure 1250 psi Pneumatic N/A Test Temperature 300 °F Nominal Operating Pressure XX
9. Remarks/Code Cases: A VT-2 Visual Examination of the disturbed mechanical joints was performed during the system conditions listed in block 8 above. The replacement plan was revised by supplement number 93-20174 which documented the tapping out of body to bonnet bolt holes.

Applicable Manufacturer's Data Reports to be Attached

Note: Supplemental sheets in form of lists, sketches, of drawings may be used, provided (1) size is 8-1/2in x 11in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate of Compliance

We certify that the statements made in the report are correct and this Replacement conforms to the rules of the ASME Code, Section XI repair or replacement

Signed

David W. Bacon
Owner or Owner's Designee, Title

David W. Bacon
Engineering Technician

Date August 19, 1993

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Maryland and employed by Arkwright Mutual Insurance Co. of Norwood, Ma. have inspected the components

described in this Owners Report during the period 5-30-93 to 6-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.

Factory Mutual Engineering Association

Robert W. Lawrence
Inspector's Signature

Commissions NB 8226 ANI MD 647

National Board, State, and Endorsements

Date: August 20, 1993

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Repaired, Replaced or Replacement	Name of Manufacture	MFG's Serial No.	National Board No	Other Identification	Year Built	ASME Code Stamped Y or N
Valve	Replaced	Velan Engineering	Not Available	N/A	#21 HPSI Pp Discharge Check Valve	1977	Y
Valve	Replacement	Velan Engineering	54134-MX Mech No.90749	N/A	3" Valve Disc	1984	Y

ENCLOSURE (3)

BALTIMORE GAS AND ELECTRIC COMPANY
INSERVICE INSPECTION REPORT
FOR CALVERT CLIFFS UNIT 2

1993 INSERVICE EXAMINATION OF SELECTED
CLASS 1, CLASS 2, AND CLASS 3
COMPONENTS AND SYSTEMS
OF
CALVERT CLIFFS NUCLEAR POWER PLANT
UNIT 2

VOLUMES 1 THROUGH 5