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June 6, 2016

U. S. Nuclear Regulatory Commission
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Washington, DC 20555

Calvert Cliffs Nuclear Power Plant, Unit No. 1
Renewed Facility Operating License No. DPR-53
NRC Docket No. 50-317

Subject: Inservice Inspection Report

Reference: 1. American Society of Mechanical Engineers, Boiler & Pressure Vessel Code, Section XI, Article IWA-6000

Pursuant to Reference 1, please find enclosed the Inservice Inspection Report for the Calvert Cliffs Nuclear Power Plant Unit 1.

There are no regulatory commitments contained in this letter.

Should you have questions regarding this matter, please contact Mr. Larry D. Smith at (410) 495-5219.

Respectfully,

Larry D. Smith
Manager – Regulatory Assurance

LDS/PSF/bjm

Enclosure: (1) 2016 Owner's Activity Report for RFO-22 Inservice Examinations

cc: Mr. Robert Gavel

cc: **(Without Enclosure)**
NRC Project Manager, Calvert Cliffs
NRC Regional Administrator, Region I

NRC Resident Inspector, Calvert Cliffs
S. Gray, MD-DNR

AD47
NRK

ENCLOSURE (1)

**2016 OWNER'S ACTIVITY REPORT FOR
RFO-22 INSERVICE EXAMINATIONS**

Calvert Cliffs Nuclear Power Plant, LLC
1650 Calvert Cliffs Parkway
Lusby, MD 20657



**Fourth Interval / Second Period
Inservice Inspection Program**

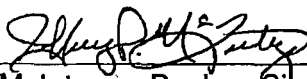
and

**Second Interval / Second Period
Containment IWE/L Program**

**2016 Owner's Activity Report
for
RFO-22 Inservice Examinations**

Commercial Service Date: May 8, 1975
NRC Docket Number: 50-317
Document Number: CCNPP-1-OAR-004-022
Revision Number: 00

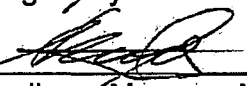
Prepared by:


 6-2-16
Jeffrey McIntyre - Backup Site ISI Program Owner

Reviewed by:

 6/2/16
Angel Reyes-Cruz - Site ISI Program Owner

Reviewed by:

 6/2/16 FOR KURT BODINE
Kurt Bodine - Manager Nuclear Engineering Programs

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	Fourth Interval / Second Period Inservice Inspection Second Interval / Second Period Containment 2016 Owner's Activity Report for RFO-22 Inservice Examinations	

Abstract

This Owner's Activity Report (OAR) summarizes the results of the Calvert Cliffs Nuclear Power Plant (CCNPP), Unit 1, American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (B&PVC), Section XI, Inservice Inspection (ISI) examinations performed in Refueling Outage twenty two (RFO-22) during the period from March 21, 2014 through March 10, 2016 of the Second Inservice Inspection Period which began on October 10, 2012 and is scheduled to end on October 9, 2016, and the Fourth outage of the Fourth Ten-Year Inservice Inspection Interval which began on October 10, 2009 and is scheduled to end on June 30, 2019.

This report complies with the requirements set forth by ASME B&PVC, Section XI 2004 Edition, Article IWA-6000 as modified by ASME Code Case N-532-4, "Repair/Replacement Activity Documentation Requirements and Inservice Summary Report Preparation and Submission."

In accordance with ASME Section XI, IWB-2400, IWC-2400, IWD-2400, IWE-2400, and IWF-2400, and with the exception of those examinations that are limited to components selected for examination under Examination Categories B-L-2 and B-M-2 and required only when the pump or valve is disassembled as specified in Table IWB-2500-1, IWC-2500-1, IWD-2500-1, and IWE-2500-1, including those examinations which CCNPP has requested and received approval in the form of requests for relief or alternates, the required examinations in each examination category have been completed for the Second outage of the Second Inspection Period of the Fourth Inspection Interval in accordance with Tables IWB-2412-1, IWC-2412-1, IWD-2412-1, IWE-2412-1 and IWF-2410-2.


Owner's Activity Reports – Form OAR-1

Owner's Activity Reports, Form OAR-1, were prepared and certified upon completion of the Calvert Cliffs Nuclear Power Plant Unit 1, 2016 Refueling Outage (RFO-22) examination activity in accordance with the following inspection plans:

- Fourth Inservice Inspection Program Plan
- Second Interval Containment Inservice Inspection Program Plan
- Fourth Interval Inservice Inspection Pressure Testing Program Plan

In addition to the Owner's Activity Reports, Form OAR-1, the following Tables are also included:

- a. **Items with Flaws or Relevant Conditions that Require Evaluation for Continued Service**, Table 1, which provides a listing of item(s) with flaws or relevant conditions that required evaluation to determine acceptability for continued service, whether or not the flaw or relevant condition was discovered during a scheduled examination or test, and provides such information as Examination Category, Examination Item Number, Item Description, Flaw Characterization (as required by IWA-3300).
- b. **Abstract of Repairs, Replacements or Corrective Measures Required for Continued Service**, Table 2, which identifies those items containing flaws or relevant conditions that exceeded the ASME XI acceptance criteria (IWB-3000, IWC-3000, and IWD-3000) or in the case of supports, IWF-3000 acceptance criteria; even though the discovery of the flaw or relevant condition that necessitated the repair, replacement, or corrective measure, may not have resulted from an examination or test required by ASME Section XI, and provides such information as Code Class, item description, description of work, date completed, and the repair replacement plan number.

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FORM OAR-1 OWNER'S ACTIVITY REPORT
Fourth Interval/Second Period of Inservice Inspection Program
 As required by the provisions of the ASME Code Case N-532-4

Report Number CCNPP-1-OAR-004-022

Plant Calvert Cliffs Nuclear Power Plant

Unit No. 1 Commercial Service Date May 8, 1975 Refueling Outage Number RFO-22
(if applicable)

Current Inspection Interval Fourth Inservice Inspection Interval – October 10, 2009 to June 30, 2019
(1st, 2nd, 3rd, 4th, other)

Current Inspection Period Second Inservice Inspection Period – October 10, 2012 to October 9, 2016
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the Inspection Plans 2004 Edition, No addenda

Date / Revision of Inspection Plans Rev. 1 Ch. 1 Dated June 4, 2013

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans N/A

Code Cases used: N-460, N-532-4, N-566-2, N-616, N-624, N-639, N-686-1, N-716, N-722-1, N-729-1, N-740-2, N-753, N-770-1

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests, meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of RFO-22 conform to the requirements of Section XI. (refueling outage number)

Signed Kurt Bodine - *[Signature]* Angel Reyes FOR KURT BODINE Date 6/2/16
Manager, CCNPP Nuclear Engineering Programs

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 The Hartford Steam Boiler Inspection and Insurance Company of Connecticut of Hartford, Connecticut

have inspected the items described in this Owner's Activity Report, and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI

By signing this certificate neither the Inspector nor his employer makes any warranty expressed or implied concerning the repair/replacement activities and evaluation 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

[Signature] Commissions NB 15304 A, N, I, IS
(Inspector's Signature) National Board, State, Province, and Endorsements

Date 6/2/2016

	Calvert Cliffs Nuclear Power Plant Unit 1 Fourth Interval / Second Period Inservice Inspection Second Interval / Second Period Containment 2016 Owner's Activity Report for RFO-22 Inservice Examinations	CCNPP-1-OAR-004-022 Rev. 00 June 2, 2016 Page 4 of 6

FORM OAR-1 OWNER'S ACTIVITY REPORT
Second Interval/Second Period of Containment IWE/L Inservice Inspection Program
 As required by the provisions of the ASME Code Case N-532-4

Report Number	CCNPP-1-OAR-004-022				
Plant	Calvert Cliffs Nuclear Power Plant				
Unit No.	1	Commercial Service Date	May 8, 1975	Refueling Outage Number	RFO-22
	(if applicable)				
Current Inspection Interval	Second Inservice Inspection Interval -- September 9, 2009 to September 9, 2018 <small>(1st, 2nd, 3rd, 4th, other)</small>				
Current Inspection Period	Second Inservice Inspection Period -- September 9, 2011 to September 9, 2015 <small>(1st, 2nd, 3rd)</small>				
Edition and Addenda of Section XI applicable to the Inspection Plans	2004 Edition, No addenda				
Date / Revision of Inspection Plans	Rev. 1 Dated Feb. 6, 2014				
Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans	N/A				
Code Cases used:	N-532-4, N-624, N-686-1, N-739, N-753				

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests, meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of RFO-22 conform to the requirements of Section XI (refueling outage number)

Signed: Kurt Bodine - *Robert Angel Reyes for Kurt Bodine* Date 6/2/16
Manager, CCNPP Nuclear Engineering Programs

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 The Hartford Steam Boiler Inspection and Insurance Company of Connecticut of Hartford, Connecticut

have inspected the items described in this Owner's Activity Report, and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI

By signing this certificate neither the Inspector nor his employer makes any warranty expressed or implied concerning the repair/replacement activities and evaluation 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

Angel Reyes Commissions NB 15304 A, N, I, IS
(Inspector's Signature) National Board, State, Province, and Endorsements

Date 6/2/2016


	Calvert Cliffs Nuclear Power Plant Unit 1 Fourth Interval / Second Period Inservice Inspection Second Interval / Second Period Containment 2016 Owner's Activity Report for RFO-22 Inservice Examinations	CCNPP-1-OAR-004-022 Rev. 00 June 2, 2016 Page 5 of 6

Table 1
Items with Flaws or Relevant Condition that Require Evaluation for Continued Service
As required by the provisions of the ASME Code Case N-532-4

Examination Category	Item Number	Item Description	Evaluation Description
F-A	F1.30B	Component Support (10-HB23-1017-H-9,R-6)	Acceptance by Design Evaluation per IWF-3112.3 (Accepted 'as is' per ESR-16-000104)
F-A	F1.30C	Component Support (H-3,R-9)	Acceptance by Design Evaluation per IWF-3112.3 (Accepted 'as is' per IR 02632838)
B-G-2	B7.70	1-CV-517 on 2-CV-1003	Acceptance by Boric Acid Evaluation per ER-AP-331 (Accepted 'as is' per Boric Acid Evaluation)
E-A	E1.11	Primary Containment Liner (Elevation 45')	Acceptance by Design Evaluation per IWE-3510.4 (Accepted 'as is' per ESR-16-000152)


	Calvert Cliffs Nuclear Power Plant Unit 1 Fourth Interval / Second Period Inservice Inspection Second Interval / Second Period Containment 2016 Owner's Activity Report for RFO-22 Inservice Examinations	CCNPP-1-OAR-004-022 Rev. 00 June 2, 2016 Page 6 of 6

Table 2
Abstract of Repairs, Replacements or Corrective Measures Required for Continued Service
as required by the provisions of the ASME Code Case N-532-4

Code Class	Item Description	Description of Work	Date Completed	R&R Plan Number
1	11A RCP PDT Tubing	1PDT123A Tubing Replacement	3/5/2016	2014-1-043
1	11A RCP PDT Supports	1PDT123A Missing Tubing Clamp Replacement	3/5/2016	2014-1-044
1	11A RCP PDT Supports	1PDT123A Clamp Fastener Replacement	3/5/2016	2016-1-014
1	Tubing Supports Associated with 1HVRC-104	1HVRC-104 Tubing Support Replacement	3/4/2016	2016-1-007
1	Unit 1 Reactor Coolant Pressurizer	PZR Safety Valve Nozzel 4-SR-1006-1 DM Weld Repair by FSWOL	3/8/2016	2016-1-010
2	Unit 1 RCS Makeup FLEX Isolation Valve for HPSI Hose Connection	RCS Makeup FLEX Isolation Valve For HPSI Hose Connection Mod.	3/9/2016	2015-1-060
2	11 Steam Generator Wet Layup Isolation Valve	1HVBD-211 Pin Hole Piping Leak Weld Repair	3/4/2016	2016-1-003
3	Unit 1 RCS Makeup FLEX Isolation Valve for AFW Hose Connection	New FLEX Valve and Connection 0HVSFP-345 Installation	1/19/2016	2015-1-049
3	Unit 1 S/G Make-up FLEX Isolation Valve for AFW Hose Connection	New FLEX Valve and Connection 0HVAFW-241 Installation	3/4/2016	2015-1-061
3	HB-23 Piping Support	10-HB23-1017-H-9 Shim addition and Tack Welding Activities	2/29/2016	2016-1-004

End
of
Owner's Activity Report
for
Refueling Outage 22 (RFO-22)