

# CENG

a joint venture of



**CALVERT CLIFFS  
NUCLEAR POWER PLANT**

September 7, 2012

U. S. Nuclear Regulatory Commission  
Washington, DC 20555

**ATTENTION:** Document Control Desk

**SUBJECT:** Calvert Cliffs Nuclear Power Plant  
Unit No. 1; Docket No. 50-317  
Inservice Inspection Report

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**REFERENCES:**

- (a) American Society of Mechanical Engineers, Boiler & Pressure Vessel Code, Section XI, Article IWA-6000
- (b) Letter from J. J. Stanley (CCNPP) to Document Control Desk (NRC), dated June 25, 2012, Inservice Inspection Report

Pursuant to Reference (a), Calvert Cliffs Nuclear Power Plant, LLC submitted Reference (b), the Inservice Inspection Report for Calvert Cliffs Unit 1. Enclosed is a revised Inservice Inspection Report for Calvert Cliffs Unit 1 that corrects several administrative errors contained in Reference (b).

Should you have questions regarding this matter, please contact Mr. Douglas E. Lauer at (410) 495-5219.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. J. Stanley", written over a horizontal line.

James J. Stanley  
Manager – Engineering Services

JJS/PSF/bjd

Enclosure: (1) 2012 Owner's Activity Report for RFO-20 Inservice Examinations

A047  
MRR

Document Control Desk  
September 7, 2012  
Page 2

cc: Mr. Craig Lowry

**(Without Enclosure)**  
N. S. Morgan, NRC  
W. M. Dean, NRC

Resident Inspector, NRC  
S. Gray, DNR

**ENCLOSURE (1)**

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**2012 OWNER'S ACTIVITY REPORT FOR  
RFO-20 INSERVICE EXAMINATIONS**

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


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

and

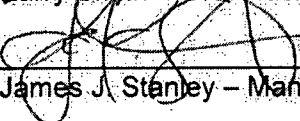
**Second Interval / Second Period  
Containment IWE/L Program**




**2012 Owner's Activity Report  
for  
RFO-20 Inservice Examinations**

Commercial Service Date: May 8, 1975  
NRC Docket Number: 50-317  
Document Number: CCNPP1-OAR-004-020  
Revision Number: 01

Prepared by:  8.29.12  
Angel Reyes – Site ISI Program Owner

Reviewed by:  08.29.12  
Larry Smith – G.S. Nuclear Engineering Programs

Approved by:  8/30/12  
James J. Stanley – Manager Engineering Services

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	<b>Fourth Interval / First Period Inservice Inspection  Second Interval / Second Period Containment  2012 Owner's Activity Report  for  RFO-20 Inservice Examinations</b>	

## 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 examinations (ISI), performed in Refueling Outage 20 (RFO-20) during the period from March 26, 2010 through April 9, 2012, the First Inservice Inspection Period which began on October 10, 2009 and is scheduled to end on October 9, 2012 and the First outage of the Fourth Ten-Year Inservice Inspection Interval which began on October 10, 2009 and is scheduled to end on June 30, 2019.

As an alternate to the requirements of the ASME Boiler and Pressure Vessel Code (B&PVC), Section XI, Article IWA-6000, CCNPP is implementing ASME Code Case N-532-4, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission as Required by IWA-4000 and IWA-6000, Section XI, Division 1." Regulatory Guide 1.147, Revision 16 (Oct. 2010), approved ASME Code Case N-532-4 for use. This report complies with the requirements of ASME Code Case N-532-4.

In accordance with ASME Section XI, IWB-2412(a), IWC-2412, and IWD-2412, 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 First Inspection Period of the Fourth Inspection Interval in accordance with Tables IWB-2412-1, IWC-2412-1, and IWD-2412-1.

In accordance with ASME Section XI, IWE-2412 and IWL-2400, 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 Inspection Period through RFO-20 of the Second Inspection Interval in accordance with Table IWE-2412-1 and IWL-2400.

### 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, 2012 Refueling Outage (RFO-20) examination activity in accordance with the following inspection plans:

Fourth Interval Inservice Inspection Program Plan

Second Interval Containment Inservice Inspection Program Plan


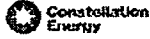

Fourth Interval Inservice Inspection Pressure Testing Program Plan

Steam Generator Inspection Program

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

**Table 1 Items with Flaws or Relevant Conditions that Require Evaluation for Continued Service**, 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).

**Table 2 Abstract of Repairs, Replacements or Corrective Measures Required for Continued Service**, identifies those items containing flaws or relevant conditions that exceeded the ASME XI acceptance criteria (IWB-3000, IWC-3000, or 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, whether the item is a repair, replacement, or corrective action, item description, description of work, if the flaw or relevant condition was found during a scheduled ASME Section XI examination or test, date completed, and the repair replacement plan number.

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

Report Number CCNPP1-OAR-004-020

Plant: Calvert Cliffs Nuclear Power Plant

Unit No.: 1

Commercial service date: May 8, 1975

Refueling outage No.: RFO-20

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

Current inspection period: First Inservice Inspection Period - October 10, 2009 to October 9, 2012  
 (1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans: 2004 Edition, No Addenda

Date and revision of inspection plans Fourth Interval Inservice Inspection Program Plan: Rev. 1 Dated Aug. 26, 2012

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-526, N-532-4, N-552, N-566-2, N-586-1, N-593, N-613-1, N-616, N-619, N-624, N-639, N-641, N-648-1, N-665, N-686-1, N-716, N-722-1, N-729-1, N-747, N-753, N-770-1  
 (If applicable)

**CERTIFICATE OF CONFORMANCE**

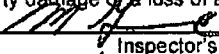
I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of RFO-20 conform to the requirements of Section XI.

Signed  Date 08.29.12  
 General Supervisor, 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 HBS GS 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.

 Commissions NB 9531-A, N.T.C. IS / MD-772  
 Inspector's Signature National Board, State, Province, and Endorsement

Date: 8/30/12

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

Report Number CCNPP1-OAR-004-020

Plant: Calvert Cliffs Nuclear Power Plant

Unit No.:   1  

Commercial service date: May 8, 1975

Refueling outage No.: RFO-20

Current inspection interval: Second Inservice Inspection Interval - September 9, 2009 to September 9, 2018  
(1st, 2nd, 3rd, 4th, other)

Current inspection period: Second Inservice Inspection Period - September 9, 2011 to September 9, 2015  
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans: 2004 Edition, No Addenda


Date and revision of inspection plans Second Interval Inservice Inspection Program Plan: Rev. 0 Dated Dec. 28, 2009

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, and N-753  
(If applicable)

**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-20 conform to the requirements of Section XI.

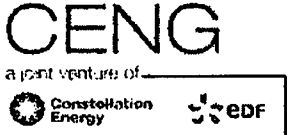
Signed  Date 08.29.12  
General Supervisor, CCNPP Nuclear Engineering Programs

**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 HBS GS 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.

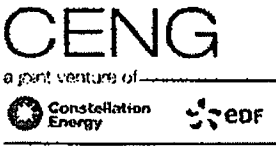
 Commissions NB 9531-A, N.E.C.I.S / MD-772  
Inspector's Signature National Board, State, Province, and Endorsement  
Date: 8/30/12

	<b>Calvert Cliffs Nuclear Power Plant Unit 1</b>	<b>CCNPP1-OAR-004-020</b>
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**Table 1**  
**Items with Flaws or Relevant Conditions 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
N/A	N/A	Class III Valve Body – 1CV-3988	Acceptance by Design Engineering Evaluation per IWD-3600 (ECP-12-000224)
E-A	E1.30	IWE Moisture Barrier	Acceptance by Design Evaluation per IWE-3510.4 (ECP-12-000207)



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**Table 2**  
**Abstract of Repairs, Replacements or Corrective Measures Required for Continued Service**  
as required by the provisions of the ASME Code Case N-632-4

Class Code	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
1	1SNUB1-83-12	Replace worn rear snubber bracket	3/8/12	2012-1-014
1	1SNUB1-83-11	Replace worn snubber bracket	3/8/12	2012-1-013
1	1SNUB1-52-39	Replace worn snubber bracket	3/14/12	2012-1-023
1	1SNUB1-52-39A	Replace worn snubber bracket	3/14/12	2012-1-023
1	1SNUB1-83-18	Replace worn rear snubber bracket	3/26/12	2012-1-012
1	1SNUB1-52-42	Replace worn snubber bracket	3/28/12	2012-1-024
1	1SNUB1-52-42A	Replace worn snubber bracket	3/28/12	2012-1-024
1	1CV-3988	Indication arrest hole in internal ligament	3/24/12	2011-1-058

**End of Owner's Activity Report**