



**Kenneth F. Robinson**  
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June 4, 2015

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Calvert Cliffs Nuclear Power Plant, Unit No. 2  
Renewed Facility Operating License No. DPR-69  
NRC Docket No. 50-318

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 2.

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,

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

for  
Kenneth F. Robinson  
Director – Engineering

KFR/PSF/bjm

Enclosure: (1) 2015 Owner's Activity Report for RFO-20 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

A047  
NRK

**ENCLOSURE (1)**

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**2015 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



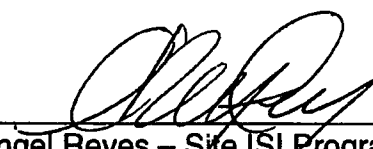
**Fourth Interval / Second Period  
Inservice Inspection Program**


**and**

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


**2015 Owner's Activity Report  
for  
2-RFO-20 Inservice Examinations**

Commercial Service Date: April 1, 1977  
NRC Docket Number: 50-318  
Document Number: CCNPP-2-OAR-004-020  
Revision Number: 00

Prepared by:  06/01/15  
Angel Reyes – Site ISI Program Owner

Reviewed by:  6/2/15  
Jeffrey McIntyre – Backup Site ISI Program Owner

Approved by:  6/3/15  
Kurt Bodine – Manager Engineering Programs

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|  <b>Exelon Generation</b> | <b>Calvert Cliffs Nuclear Power Plant Unit 2</b>   | <b>CCNPP-2-OAR-004-020</b><br>Rev. 00<br>June 2, 2015<br>Page 2 of 6 |
|  | <b>Fourth Interval / First Period Inservice Inspection</b><br><b>Second Interval / Second Period Containment</b><br><b>2015 Owner's Activity Report</b><br>for<br><b>RFO-20 Inservice Examinations</b> |  |

### Abstract

This Owner's Activity Report (OAR) summarizes the results of the Calvert Cliffs Nuclear Power Plant (CCNPP), Unit 2, American Society of Mechanical Engineers (ASME), Boiler and Pressure Vessel Code (B&PVC), Section XI, Inservice Inspection examinations (ISI), performed in Refueling Outage twenty (RFO-20) during the period from March 25, 2013 through March 09, 2015 of the Second Inservice Inspection Period which began on October 10, 2012 and is scheduled to end on October 9, 2016 and the Second 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 all requirements set forth by ASME B&PVC, Section XI 2004 Edition, Article IWA-6000, and 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-2412(a), IWC-2412(a), IWD-2412(a), IWE-2412(a), and IWF-2410(b), and Tables IWB-2500-1, IWC-2500-1, IWD-2500-1, IWE-2500-1, and IWF-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 2, 2015 Refueling Outage (RFO-20) 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, IWD-3000, IWE-3000, and IWF-3000); 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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|  | <b>Calvert Cliffs Nuclear Power Plant Unit 2</b><br><b>Fourth Interval / First Period Inservice Inspection</b><br><b>Second Interval / Second Period Containment</b><br><b>2015 Owner's Activity Report</b><br><b>for</b><br><b>RFO-20 Inservice Examinations</b> | <b>CCNPP-2-OAR-004-020</b><br>Rev. 00<br>June 2, 2015<br>Page 3 of 6 |
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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-2-OAR-004-020

Plant Calvert Cliffs Nuclear Power Plant

Unit No. 2 Commercial Service Date April 1, 1977 Refueling Outage Number RFO-20  
(if applicable)

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

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

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-513-3, N-566-2, N-616, N-624, N-639, N-686-1, N-716, N-722-1, N-729-1, N-753, N-552, N-586-1

**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-20 conform to the requirements of Section XI  
(refueling outage number)

Signed Kurt Bodine - DKurt Bodine  
Manager, CCNPP Nuclear Engineering Programs

Date 6/3/15

**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 Hartford Steam Boiler of Hartford, Connecticut  
(HSBCT)


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

Dan R. Tall  
(Inspector's Signature)

Commissions NB 9987 A, I, N  
National Board, State, Province, and Endorsements

Date 6-3-15

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|---|---|--|
|  | <b>Calvert Cliffs Nuclear Power Plant Unit 2</b><br><b>Fourth Interval / First Period Inservice Inspection</b><br><b>Second Interval / Second Period Containment</b><br><b>2015 Owner's Activity Report</b><br><b>for</b><br><b>RFO-20 Inservice Examinations</b> | <b>CCNPP-2-OAR-004-020</b><br>Rev. 00<br>June 3, 2015<br>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-2-OAR-004-020

Plant Calvert Cliffs Nuclear Power Plant

Unit No. 2 Commercial Service Date April 1, 1977 Refueling Outage Number RFO-20  
(if applicable)

Current Inspection Interval Second Inservice Inspection Interval – September 9, 2009 to September 9, 2018  
(1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, other)

Current Inspection Period Second Inservice Inspection Period – September 9, 2011 to September 9, 2015  
(1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>)

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-20 conform to the requirements of Section XI  
(refueling outage number)

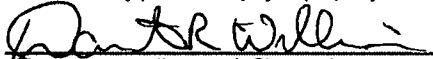
Signed Kurt Bodine -  Date 6/3/15  
Manager, CCNPP Nuclear Engineering Programs

**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 Hartford Steam Boiler of Hartford, Connecticut  
(HSBCT)


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

  
(Inspector's Signature)


Commissions NB 9987 A.I.N  
National Board, State, Province, and Endorsements

Date 6-3-15

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|---|---|--|
|  <b>Exelon Generation.</b> | <b>Calvert Cliffs Nuclear Power Plant Unit 2</b>  | <b>CCNPP-2-OAR-004-020</b><br>Rev. 00<br>June 2, 2015<br>Page 5 of 6 |
|   | <b>Fourth Interval / First Period Inservice Inspection</b><br><b>Second Interval / Second Period Containment</b><br><b>2015 Owner's Activity Report</b><br><b>for</b><br><b>RFO-20 Inservice Examinations</b> |  |

**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

| <b>Examination Category</b> | <b>Item Number</b> | <b>Item Description</b> | <b>Evaluation Description</b>  |
|-----------------------------|--------------------|-------------------------|--|
| E-A                         | E1.30              | IWE Moisture Barrier    | Acceptance by Design Evaluation per IWE-3510.4 (ECP-12-000207)         |
| F-A                         | F1.30B             | Component Support       | Acceptance by Design Evaluation per IWF-3112.3 (ES-002; ECP-15-000104) |

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|  <b>Exelon Generation</b> | <b>Calvert Cliffs Nuclear Power Plant Unit 2</b>   | <b>CCNPP-2-OAR-004-020</b><br>Rev. 00<br>June 2, 2015<br>Page 6 of 6 |
|  | <b>Fourth Interval / First Period Inservice Inspection</b><br><b>Second Interval / Second Period Containment</b><br><b>2015 Owner's Activity Report</b><br>for<br><b>RFO-20 Inservice Examinations</b> |  |

**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

| <b>Code Class</b> | <b>Item Description</b>      | <b>Description of Work</b>  | <b>Date Completed</b> | <b>R&amp;R Plan Number</b> |
|-------------------|------------------------------|---|-----------------------|----------------------------|
| 1                 | CC-4-2016 Tubing Support     | Restore pipe support adjacent to 2HVS1-702 back to original design requirements                     | 3/6/2015              | 2015-2-015                 |
| 1                 | PZR Relief Valve 2RV201      | Rejectable bolting was replaced with new bolting  | 2/23/2015             | 2014-2-050                 |
| 1                 | 2PDT123A Tubing Support      | Restore pipe support near 1PDT-123A back to original design requirements                            | 3/4/2015              | 2015-2-018                 |
| 3                 | Check Valve S/N: 11327       | Perform weld repairs to spare Saltwater Check Valve SN: 11327                                       | 12/9/2014             | 2014-2-079                 |
| 3                 | 2CKVSW-111                   | Replace 2CKVSW-111 due to pin hole leak with spare (S/N: 11327)                                     | 12/19/2014            | 2013-2-063                 |
| 1                 | CC-8-2003 Supports           | Replace missing bolting material on Support numbers 17 and 22 on line CC-8-2003                     | 3/4/2015              | 2015-2-016                 |
| 1                 | Rx Vent Line Tubing Supports | Replace missing U-bolts and associated hardware on Rx vent line tubing IAW ECP-15-000162            | 3/6/2015              | 2015-2-024                 |
| 3                 | 12" LJ-1-2012 Piping Spool   | Permanent repair of through wall leak in SW piping temporarily soft patched using Code Case N-513-3 | 2/27/2015             | 2013-2-064                 |
| 3                 | 1-1/2" JE-2 Piping Elbow     | Replace 1-1/2" JE-2 pipe elbow upstream of 2RV5209 due to through wall leak                         | 10/1/2014             | 2014-2-053                 |

End  
of  
Owner's Activity Report  
for  
Refueling Outage 20 (RFO-20)