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June 13, 2019

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

Calvert Cliffs Nuclear Power Plant, Unit No. 1
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 that reads "Larry D. Smith".

Larry D. Smith
Manager – Regulatory Assurance

LDS/KLG/lmd

Enclosure: (1) 2019 Owner's Activity Report for 2-RFO-22 Inservice Examinations

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

NRC Resident Inspector, Calvert Cliffs
D. A. Tancabel, MD-DNR

A047
NRR

ENCLOSURE (1)

**2019 OWNER'S ACTIVITY REPORT FOR
2-RFO-22 INSERVICE EXAMINATIONS**

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number CC2R23

Plant Calvert Cliffs Nuclear Power Plant

Unit No. 2 Commercial Service Date April 1, 1977 Refueling Outage Number CC2R23
(if applicable)

Current Inspection Interval ISI and Pressure Testing (PT) Fourth Inservice Inspection Interval – October 10, 2009 to June 30, 2019; Containment Inservice Inspection Interval – September 9, 2009 to June 30, 2019
(1st, 2nd, 3rd, 4th, other)

Current Inspection Period ISI and Pressure Testing Third Inservice Inspection Period – October 10, 2016 to June 30, 2019; Containment (CISI) Third Inservice Inspection Period September 9, 2016 to June 30, 2019
(1st, 2nd, 3rd)

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

Date / Revision of Inspection Plans ISI – Rev. 00200 Dated August 19, 2015 and Rev. 00300 Dated January 28, 2019; PT – Rev. 00200 Dated October 23, 2014 and Rev. 00300 Dated January 28, 2019; CISI - Rev. 00100 Dated February 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-460, N-504-4, N-513-3, N-513-4, N-526, N-532-4, N-552, N-552-1, N-561-2, N-562-2, N-566-2, N-586-1, N-593, N-593-2, N-613-1, N-616, N-619, N-624, N-638-6, N-639, N-641, N-643-2, N-648-1, N-653-1, N-664, N-686-1, N-705, N-716, N-722-1, N-729-1, N-729-4, N-739, N-731, N-733, N-747, N-751, N-753, N-762, N-770-1, N-770-2, N-773, N-786, N-786-1, N-789, N-798, N-800, N-805, N-823, N-825, N-845

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 CC2R23 conform to the requirements of Section XI (refueling outage number)


Signed Zemenu Demeke - Zemenu Demeke Date 6/13/19
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 Co. 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 15304 ANI, MD 1328
(Inspector's Signature) National Board, State, Province, and Endorsements
 Date 6/13/19

FORM OAR-1 OWNER'S ACTIVITY REPORT

**Table 1
Items with Flaws or Relevant Condition that Require Evaluation for Continued Service**

Examination Category and Item Number	Item Description	Evaluation Description
D-A, D2.10	Salt Water Cooling Piping	Evaluated through-wall leaks and thinned areas in accordance with Code Case N-513-4 (reference Operability Evaluation 18-001 (issue reports 04138657 and 04139053)).
B-P, B15.10	Chemical and Volume Control Valve 2-CV-517 Bolting	Boric acid deposits on and adjacent to the valve bolting were evaluated as acceptable per Code Case N-566-2 (reference ECP-19-000120).
Code Case N-729-4, B4.30	Reactor Vessel Closure Head 2SYS064	Boric acid deposits at penetrations 72 and 73 were evaluated to be acceptable as required by Code Case N-729-4, -3142 (reference issue report 04224776). The source of the deposits was determined to be a misaligned flange at valve 2HVRC-104 that leaked prior to restart from the 2017 refueling outage based on radiochemistry analysis and boric acid deposit observations. There was no wastage or ferritic steel wall reduction observed.
B-P, B15.10	Reactor Coolant Pump RCP-21B Main Flange Studs and Nuts and Seal Housing Bolts	Boric Acid was identified on the 21B RCP Studs, Nuts, and Seal Bolting. Evaluation ECP-19-000297, performed per Code Case N-566-2, concluded that the BACC deposits identified on the 21B RCP Studs, Nuts, and Seal Bolting do not present any plant equipment operability issues and no corrosion or degradation was identified to warrant further investigation.
B-N-3, B13.70	Core Support Barrel Snubbers	Reactor Vessel (RV)120-degree Core Stabilizing Lug Shim Lockpin was discovered protruding and bent from its installed location. Approximately 9/16" of the length of the pin is hollowed and has broken off. ECP-19-000129 concluded that the snubber lug will be able to perform its intended safety function in the event of shim bolt/shim pin failures.
B-N-3, B13.70	Upper Guide Structure Support Plate – (Top) & Keyways	The 180-degree Core Support barrel (CSB) Alignment Key and key retaining pin was discovered to be slightly backed out. The result of this condition is that this one alignment key is no longer tight against the keyway face in the CSB flange. ECP-19-000134 concluded that the gap of the Core Barrel Alignment Keys in the Core Support Barrel Flange is acceptable and that with the reactor internals assembled, there will be no potential for the key or retaining key pin to come loose.

FORM OAR-1 OWNER'S ACTIVITY REPORT

**Table 2
Abstract of Repairs, Replacements or Corrective Measures Required for Continued Service**

Code Class	Item Description	Description of Work	Date Completed	R&R Plan Number
1	Cold Leg Charging Inlet Dissimilar Metal Weld 2-CV-2005-30	Performed full structural weld overlay repair. Reference February 11, 2019 Letter from Exelon Generation (Accession Number ML19072AA096) for Additional Information).	03/14/2019	2019-2-009
2	Shutdown Cooling Heat Exchanger 21SDCHX Outlet Nozzle	Removed dye penetrant indications by grinding. No welding was required and the indications were determined to be due to fabrication or handling damage.	03/01/2019	2019-2-008
3	Salt Water Cooling Piping Spool Pieces 2- MC6-2004 and 2-MC6- 2018	Replaced 8" nominal pipe size pipe spool segments with stainless steel piping due to wall thinning and through-wall leak.	06/18/2018	2018-2-006 and 2018-2-007
3	Component Cooling Heat Exchanger 2HXCC21	Replaced defective tubing.	03/05/2019	2018-2-063
3	Salt Water Pump Discharge Check Valve 2CKVSW-103	Replaced valve with spare due to through-wall leak. Repaired/rebuilt removed valve.	05/23/2018	2017-2-043 and 2017-2-046