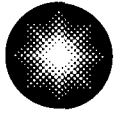


James A. Spina
Vice President

Calvert Cliffs Nuclear Power Plant, Inc.
1650 Calvert Cliffs Parkway
Lusby, Maryland 20657
410.495.5200
410.495.3500 Fax



Constellation Energy
Generation Group

June 27, 2007

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit No. 2; Docket No. 50-318
Inservice Inspection Report

REFERENCE: (a) American Society of Mechanical Engineers, Boiler & Pressure Vessel
Code, Section XI, Article IWA-6000

Pursuant to Reference (a), please find enclosed the Inservice Inspection Report for the Calvert Cliffs Nuclear Power Plant Unit 2. This inspection fulfilled the intentions and requirements stated in our commitment to comply with the American Society of Mechanical Engineers, Boiler & Pressure Vessel Code, Section XI, Inservice Inspection Requirements.

Should you have questions regarding this matter, please contact Mr. Jay S. Gaines at (410) 495-5219.

Very truly yours,

JAS/CAN/bjd

Enclosures: (1) 2007 Owners Activity Report for RFO-16 Inservice Examinations

cc: Mr. Craig Lowry

(Without Enclosures)
D. V. Pickett, NRC
S. J. Collins, NRC

Resident Inspector, NRC
R. I. McLean, DNR

AD47

NRR

ENCLOSURE (1)

**2007 OWNER'S ACTIVITY REPORT
FOR RFO-16 INSERVICE EXAMINATIONS**



**Constellation
Nuclear**

**Calvert Cliffs
Nuclear Power Plant**

*A Member of the
Constellation Energy Group*

**Constellation Energy
750 East Pratt Street
Baltimore, Maryland 21202**

**THIRD INSERVICE INSPECTION INTERVAL
THIRD INSERVICE INSPECTION PERIOD
2007 OWNER'S ACTIVITY REPORT
FOR
RFO-16 INSERVICE EXAMINATIONS**

Prepared For

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

Commercial Service Date: April 1, 1977
NRC Docket Number: 50-318
Document Number: CCNPP2-OAR-003-016
Revision Number: 00 Date: June 12, 2007

Prepared by: *Roy E. Hall* 6/12/2007
Roy Hall - Principal Engineer Analyst Corporate Engineering Programs
Reviewed by: *Edward L. Anderson* 6/14/2007
Edward L. Anderson - Principal Engineer Analyst Corporate Engineering Programs
Approved by: *Glenn R. Perkins* 6/14/2007
Glenn R. Perkins - General Supervisor Corporate Engineering Programs
Reviewed by: *Jacob A. Milliken* 6/13/2007
Jacob A. Milliken - Site ISI Program Implementer
Approved by: *Joseph M. Mote for BCR* 6/14/2007
Bernie C. Rudell - General Supervisor Site Engineering Programs


 Constellation Nuclear Calvert Cliffs Nuclear Power Plant <small>A Member of the Constellation Energy Group</small>	Calvert Cliffs Nuclear Power Plant, Unit 2	CCNPP2-OAR-003-16
	THIRD INSERVICE INSPECTION INTERVAL 2007 OWNER'S ACTIVITY REPORT FOR INSERVICE EXAMINATIONS	Rev. 00 Date: June 12, 2007 Page i - 2 of i - 11

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**Constellation
Nuclear**

Calvert Cliffs
Nuclear Power Plant

*A Member of the
Constellation Energy Group*

Calvert Cliffs Nuclear Power Plant, Unit 2

**THIRD INSERVICE INSPECTION INTERVAL
2007 OWNER'S ACTIVITY REPORT
FOR
INSERVICE EXAMINATIONS**

CCNPP2-OAR-003-16


Rev. 00

Date: June 12, 2007

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RECORD OF REVISION

REVISION No.	DATE	AFFECTED PAGES	REASON FOR REVISION
00	June 12, 2007	Entire Document	Initial issue of Owner's Activity Report for ASME Section XI Inservice Inspection, Risk-Informed Inspection and Containment Inservice Examinations in accordance with the requirements of ASME Code Case N-532-1.

 Constellation Nuclear Calvert Cliffs Nuclear Power Plant <small>A Member of the Constellation Energy Group</small>	Calvert Cliffs Nuclear Power Plant, Unit 2	CCNPP2-OAR-003-16
	THIRD INSERVICE INSPECTION INTERVAL 2007 OWNER'S ACTIVITY REPORT FOR INSERVICE EXAMINATIONS	Rev. 00 Date: June 12, 2007 Page i - 4 of i - 11

ABSTRACT

This Owner's Activity Report summarizes the results of the Calvert Cliffs Nuclear Power Plant (CCNPP), Unit 2, American Society of Mechanical Engineers (ASME) Section XI Inservice Inspection, Risk-Informed Inspection and Containment Inservice Examinations performed during Refueling Outage Sixteen (RFO-16), from February 24, 2007 through April 2, 2007, and the First outage of the Third Inservice Inspection Period that started on July 1, 2006 and is scheduled to end on June 30, 2009.

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-532-1, "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 14, approved ASME Code Case N-532-1 for use. This Report complies with the requirements of Code Case N-532-1 and the conditions identified in RG 1.147.


OWNER'S ACTIVITY REPORTS - FORM OAR-1

Owner's Activity Reports Form OAR-1's were prepared and certified upon completion of the CCNPP Unit 2, 2007 refueling outage (RFO-16) examination activity in accordance with the following inspection plans and schedules:


- Inservice Inspection Program Plan(s) for the Third and successive Inspection Intervals for CCNPP Units 1 and 2
- Long Term Plan for CCNPP, Unit 2
- CCNP-002-004, Calvert Cliffs Nuclear Power Plant Risk-Informed Inservice Inspection Application to Class 1 and 2 Piping Final Report
- ISI Program Plan ASME XI, IWE/IWL First Inspection Interval

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

- a. **Abstract of Examinations and Tests**, Table 1, provides such information as ASME Code Examination Category, Total Examinations Required for the Inspection Interval, Total Examinations Required for this Period, Total Examinations Credited (%) for this Period, Total Examinations Credited (%) to Date for the Interval, and any remarks that may be applicable to each Examination Category.
- b. **Items with Flaws or Relevant Conditions that Require Evaluation for Continued Service**, Table 2, 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).
- c. **Abstract of Repairs, Replacements or Corrective Measures Required for Continued Service**, Table 3, identifies those items containing flaws or relevant conditions that exceeded the ASME Section XI acceptance criteria (IWX-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 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 Section XI Examination or test, date completed and the repair replacement plan number.

 Constellation Nuclear Calvert Cliffs Nuclear Power Plant <small>A Member of the Constellation Energy Group</small>	Calvert Cliffs Nuclear Power Plant, Unit 2	CCNPP2-OAR-003-16
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In accordance with ASME Section XI, IWB-2412 (a), IWC-2412, IWD-2412 and IWE-2412(a), IWF-2410 and with the exception of the examinations that may be deferred until the end of the inspection interval as specified in Table 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 relief request, the required examinations in each examination category have been completed for the Third In-service Inspection Period in accordance with Tables IWB-2412-1, IWC-2412-1, IWD-2412-1, IWE-2412-1 and IWF-2410-2.

 Constellation Nuclear Calvert Cliffs Nuclear Power Plant <small>A Member of the Constellation Energy Group</small>	Calvert Cliffs Nuclear Power Plant, Unit 2	CCNPP2-OAR-003-16
	THIRD INSERVICE INSPECTION INTERVAL 2007 OWNER'S ACTIVITY REPORT FOR INSERVICE EXAMINATIONS	Rev. 00 Date: June 12, 2007 Page 1-6 of 1-11

**FORM OAR-1
 OWNER'S ACTIVITY REPORT**

As required by the provisions of the ASME Code Case N-532-1

Report Number CCNPP2-OAR-003-16

Owner Constellation Energy, 750 Pratt Street, Baltimore, Maryland 21202
 (Name and Address of Owner)

Plant Calvert Cliffs Nuclear Power Plant, 1650 Calvert Cliffs Parkway, Lusby, Maryland 20657
 (Name and Address of Plant)

Plant Unit 2 Commercial Service Date April 1, 1977 Refueling Outage Number RFO-16

Current Inspection Interval Third Inservice Inspection Interval - July 1, 1999 to June 30, 2009
 (1st, 2nd, 3rd, 4th, Other)

Current Inspection Period Third Inservice Inspection Period - July 1, 2006 to June 30, 2009
 (1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the Inspection Plan 1998 Edition, No Addenda

Date and Revision of Inspection Plan Revision 02, Dated April 24, 2007

Edition and Addenda of ASME Section XI applicable to Repairs and Replacements, if different than the Inspection Plan N/A

CERTIFICATE OF CONFORMANCE

I certify that the statements made in this Owner's Activity Report are correct, and that the examinations, tests, repairs, replacements, evaluations and corrective measures represented by this report conform to the requirements of Section XI.

Certificate of Authorization No. N/A Expiration Date N/A
 (If applicable)

Signed Glean R Perkins Date 6/14/2007
 (General Supervisor - Corporate 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 (HSBCT) of Hartford, Connecticut have inspected the items described in this Owner's Activity Report, during the period February 24, 2007 to April 2, 2007 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 examinations, tests, repairs, replacements, evaluations and corrective measures 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.

William J. Yeager Commissions NB12990, Maryland - 1200, A, N, I
 Inspector's Signature National Board, State, Province, and Endorsements

Date JUNE 14, 2007

 Constellation Nuclear Calvert Cliffs Nuclear Power Plant <small>A Member of the Constellation Energy Group</small>	Calvert Cliffs Nuclear Power Plant, Unit 2	CCNPP2-OAR-003-16
	THIRD INSERVICE INSPECTION INTERVAL 2007 OWNER'S ACTIVITY REPORT FOR INSERVICE EXAMINATIONS	Rev. 00 Date: June 12, 2007 Page 1 - 7 of 1 - 11

**FORM OAR-1
OWNER'S ACTIVITY REPORT**

As required by the provisions of the ASME Code Case N-532-1

Report Number CCNPP2-OAR-003-16

Owner Constellation Nuclear Generation, 750 Pratt Street, Baltimore, Maryland 21202
(Name and Address of Owner)

Plant Calvert Cliffs Nuclear Power Plant, 1650 Calvert Cliffs Parkway, Lusby, Maryland 20657
(Name and Address of Plant)

Plant Unit 2 Commercial Service Date April 1, 1977 Refueling Outage Number RFO-16

Current Inspection Interval First Containment Inspection Interval - July 1, 1999 to June 30, 2009
(1st, 2nd, 3rd, 4th, Other)

Current Inspection Period Third Inservice Inspection Period - July 1, 2006 to June 30, 2009
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the Inspection Plan 1992 Edition, 1992 Addenda

Date and Revision of Inspection Plan Revision 02, Dated December 27, 2001

Edition and Addenda of ASME Section XI applicable to Repairs and Replacements, if different than the Inspection Plan N/A

CERTIFICATE OF CONFORMANCE

I certify that the statements made in this Owner's ^{2nd cycle} Activity Report are correct, and that the examinations, tests, repairs, replacements, evaluations and corrective measures represented by this report conform to the requirements of Section XI.

Certificate of Authorization No. N/A Expiration Date N/A
(if applicable)

Signed *Sean R. Perkins* Date 6/14/2007
(General Supervisor - Corporate 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 (HSBCT) of Hartford, Connecticut have inspected the items described in this Owner's Activity Report, during the period February 24, 2007 to April 2, 2007 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 examinations, tests, repairs, replacements, evaluations and corrective measures 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.

William J. Yuzep Commissions NB12990, Maryland - 1200, A, N, I
Inspector's Signature National Board, State, Province, and Endorsements

Date JUNE 14, 2007


 Constellation Nuclear Calvert Cliffs Nuclear Power Plant <small>A Member of the Constellation Energy Group</small>	Calvert Cliffs Nuclear Power Plant, Unit 2	CCNPP2-OAR-003-16
	THIRD INSERVICE INSPECTION INTERVAL 2007 OWNER'S ACTIVITY REPORT FOR INSERVICE EXAMINATIONS	Rev. 00 Date: June 12, 2007 Page i - 8 of i - 11

TABLE 1
ABSTRACT OF EXAMINATION AND TESTS
 As required by the provisions of the ASME Code Case N-532-1

CODE EXAMINATION CATEGORY	TOTAL EXAMINATIONS REQUIRED FOR INTERVAL	TOTAL EXAMINATIONS CREDITED FOR THIS PERIOD	TOTAL EXAMINATIONS CREDITED (%) FOR THE PERIOD	TOTAL EXAMINATIONS CREDITED (%) TO DATE FOR THE INTERVAL	REMARKS
B-A	27	0	0.00%	3.70%	Head to Flange Weld for old head completed during First Period. Deferral Permissible
B-B	5	1	100%	100%	None
B-D	28	4	19.05%	35.71%	Partial Deferral Permissible
B-G-1	16	4	40.0%	62.5%	Deferral Permissible
B-G-2	45	4	28.57%	46.67%	Deferral Permissible
B-K	8	4	80.00%	100.00%	Steam Generators were replaced during the Second Period
B-L-1	4	0	0.00%	0.00%	Deferral Permissible
B-L-2	4	0	0.00%	0.00%	Deferral Permissible, When Disassembled
B-M-1	2	2	100%	100%	Deferral Permissible
B-M-2	6	1	20.0%	16.67%	Deferral Permissible, When Disassembled
B-N-1	3	0	0.00%	66.67%	Note 1
B-N-2	2	0	0.00%	0.00%	Deferral Permissible
B-N-3	1	0	0.00%	0.00%	Deferral Permissible
B-O	1	0	0.00%	0.00%	Deferral Permissible
C-A	4	1	50.0%	75.0%	None
C-B	8	2	28.57%	37.50%	Reference Condition Report IRE-022-434 for failure to meet Program B Percentage Requirements
C-C	24	9	37.50%	100%	None
C-G	2	0	0.00%	50.00%	None
C-H	3	0	0.00%	66.66%	None
D-A	49	21	56.76%	100%	None
D-B	3	0	0.00%	66.66%	None
F-A	214	81	64.80%	100%	None
R-A(H)	20	10	90.91%	90.0%	Note 2
R-A(M)	81	26	63.41%	83.95%	Note 2
E-A	214	213	99.95%	99.95%	Note 3

Notes:

1. 100% of accessible surfaces examined each period
2. RR-ISI-RI-001 and RR-ISI-002 requires 100% completion during Second and Third Periods.
3. 100% of accessible areas are required to be examined each period. (Calvert Cliffs Technical Specifications require an examination of the accessible portions of metal liner each refueling outage)


 Constellation Nuclear Calvert Cliffs Nuclear Power Plant <small>A Member of the Constellation Energy Group</small>	Calvert Cliffs Nuclear Power Plant, Unit 2	CCNPP2-OAR-003-16
	THIRD INSERVICE INSPECTION INTERVAL 2007 OWNER'S ACTIVITY REPORT FOR INSERVICE EXAMINATIONS	Rev. 00 Date: June 12, 2007 Page i - 9 of i - 11

TABLE 2
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRE EVALUATION FOR CONTINUED SERVICE

As required by the provisions of the ASME Code Case N-532-1

EXAMINATION CATEGORY	ITEM NUMBER	ITEM DESCRIPTION	FLAW CHARACTERIZATION (IWA-3300)	FLAW OR RELEVANT CONDITION FOUND DURING SCHEDULED SECTION XI EXAMINATION OR TEST (YES OR NO)
F-A	F1.30B	R-1 (Component Support)	Relevant Conditions-Loose locknut on sway strut and unacceptable clearance measurements	Yes
F-A	F1.20B	Support 34-MS-2002-H-7	Relevant Condition-Loose nut, spring can housing deformed by load indicator	Yes
B-G-2	B7.60	RCP-22A Seal Bolting	Evidence of leakage during depressurized walk down	Yes
F-A	F1.30A	Support H-5, R-7	Loose locknut	Yes
F-A	F1.10C	Support 12-SI-2012 - R-15Z	Missing washer	Yes
F-A	F1.10C	Support 4-PS-2003 - R63	Loose locknut	Yes
F-A	F1.10A	Support 2-CV-2018 - S-26	Loose locknut	Yes
F-A	F1.20A	Support 18-SI-2004 - R-3	Loose nuts (2) and lack of full thread engagement	Yes
F-A	F1.10C	Support 3-PS-2001 - R-32	3/8" plate blocking support movement (believe maintenance personnel inadvertently left plate during the current outage)	Yes
F-A	F1.20C	Snubber 14-SC-2003-R-6x	Unacceptable fluid levels and leakage from reservoir (reference IRE-020-268)	Yes



 Constellation Nuclear Calvert Cliffs Nuclear Power Plant <small>A Member of the Constellation Energy Group</small>	Calvert Cliffs Nuclear Power Plant, Unit 2	CCNPP2-OAR-003-16
	THIRD INSERVICE INSPECTION INTERVAL 2007 OWNER'S ACTIVITY REPORT FOR INSERVICE EXAMINATIONS	Rev. 00 Date: June 12, 2007 Page i - 10 of i - 11

TABLE 3

ABSTRACT OF REPAIRS, REPLACEMENTS, OR CORRECTIVE MEASURES REQUIRED FOR CONTINUED SERVICE

As required by the provisions of the ASME Code Case N-532-1

CODE CLASS	REPAIR REPLACEMENT OR CORRECTIVE MEASURE	ITEM DESCRIPTION	DESCRIPTION OF WORK	FLAW OR RELEVANT CONDITION FOUND DURING SCHEDULED SECTION XI EXAMINATION OR TEST (YES OR NO)	DATE COMPLETE	REPAIR REPLACEMENT PLAN NUMBER
2	Repair	2-CKV-FW-130,#22 Steam Generator Feed Water Supply Check Valve	Weld Build up of eroded/corroded areas inside valve body.	No	03/21/07	2006-2-054b (MO 2200303716)
3	Replacement	#21A Service Water Heat Exchanger, Salt Water Supply Header (18" LJ-1-2058) branch connection piping and fittings to and including vent valve 2-HVSW-402	Replaced vent valve and piping due to leakage	No	06/30/06	2006-2-005a and 2006-2-005b (MO 2200504497)
3	Replacement	#22 Component Cooling Water Heat Exchanger Salt Water Discharge Line (12" LJ-1-2010) branch connection to 2-HVSW-334	Replaced vent valve and piping due to leakage	No	05/26/06	2005-2-023 (MO 2200500193)
3	Replacement	6" LJ-1-2049, #21B Salt Water Strainer flushing piping down stream of 2-CV-5151A.	Replaced piping due to leakage	No	05/16/06	2006-2-007 (MO 2200600400)
3	Replacement	2-RV-5211, Relief Valve inlet piping from Salt Water Header.	Replaced Piping due to leakage	No	05/24/06	2006-2-008 (MO 2200600854)

 Constellation Nuclear Calvert Cliffs Nuclear Power Plant <small>A Member of the Constellation Energy Group</small>	Calvert Cliffs Nuclear Power Plant, Unit 2	CCNPP2-OAR-003-16
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**END OF INSERVICE INSPECTION
OWNER'S ACTIVITY REPORT
FOR
REFUELING OUTAGE SIXTEEN (RFO-16)**