

# CENG

a joint venture of



CALVERT CLIFFS  
NUCLEAR POWER PLANT

May 25, 2011

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

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**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. Douglas E. Lauver at (410) 495-5219.

Very truly yours,

James J. Stanley  
Manager – Engineering Services

JJS/KLG/bjd

Enclosure: (1) 2011 Owner's Activity Report for RFO Inservice Examinations (Unit 2)

cc: Mr. Craig Lowry

**(Without Enclosure)**  
D. V. Pickett, NRC  
W. M. Dean, NRC

Resident Inspector, NRC  
S. Gray, DNR

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**ENCLOSURE (1)**

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**2011 OWNER'S ACTIVITY REPORT FOR  
RFO INSERVICE EXAMINATIONS (Unit 2)**

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**Constellation Energy Nuclear Corporation**  
1650 Calvert Cliffs Parkway  
Lusby, MD 20657

**Fourth Inservice Inspection Interval**  
**First Inservice Inspection Period**

**2011 Owner's Activity Report**  
for  
**RFO-18 Inservice Examinations**

Commercial Service Date: April 1, 1977  
NRC Docket Number: 50-318  
Document Number: CCNPP2-OAR-004-018  
Revision Number: 00  
Date: April 28, 2011

Prepared by:  4-28-11


Timothy G. Beck – Site ISI Program Owner

Reviewed by:  4-28-11

William J. Wilson – G.S. Nuclear Engineering Programs

Approved by:  4/29/2011

James J. Stanley – Manager Engineering Services

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	<b>Fourth Inservice Inspection Interval</b> <b>First Inservice Inspection Period</b> <b>2011 Owner's Activity Report</b> <b>for</b> <b>RFO-18 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 eighteen (RFO-18) during the period from October 10, 2009 through March 13, 2011, the First Inservice Inspection Period which began on October 10, 2009 and is scheduled to end on June 30, 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.

In addition, the three CCNPP Unit 2 Reactor Vessel Supports were performed to satisfy the requirements of the Third Ten-Year Interval. These exams were identified as omitted from previous program plans and added after the 2009 outage. These exams were not credited towards the Fourth Ten-Year Interval.

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, IWD-2412, and IWE-2412(a), 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, IWF-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 First outage of the First Inspection Period of the Fourth Inspection Interval in accordance with Tables IWB-2412-1, IWC-2412-1, IWD-2412-1, and IWE-2412-1.


#### 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, 2011 Refueling Outage (RFO-18) examination activity in accordance with the following inspection plans:


- CENG- CCNPP1-ISI-004, 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, 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).

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

as required by the provisions of the ASME Code Case N-532-4

Report Number CCNPP-2-OAR-004-018

Plant Calvert Cliffs Nuclear Power Plant

Unit No. 2 Commercial service date April 1, 1977 Refueling outage no. RFO-18  
(if applicable)

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 June 30, 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. 0 Dated Dec. 28, 2009


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

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Code Cases used: N-722  
(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-18 conform to the requirements of Section XI.

Signed  Date 4/28/11  
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 Hartford Steam Boiler (HSBCT) 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 13074 ANI, MD 1225  
Inspector's Signature National Board, State, Province, and Endorsements

Date 5-11-11



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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-532-4

Code Class	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
B-P / B15.140	PZR Nozzle N-3	Heater sleeve plug	03/24/2011	2011-2-009

**End of  
 Owner's Activity Report  
 for  
 Refueling Outage 18 (RFO-18)**