



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

March 2, 2006

Mr. James A. Spina, Vice President  
Calvert Cliffs Nuclear Power Plant, Inc.  
Constellation Generation Group, LLC  
1650 Calvert Cliffs Parkway  
Lusby, Maryland 20657-4702

SUBJECT: ANNUAL ASSESSMENT LETTER - CALVERT CLIFFS NUCLEAR POWER PLANT  
(REPORT 05000317/2006001 AND 05000318/2006001)

Dear Mr. Spina:

On February 8, 2006, the NRC staff completed its performance review of Calvert Cliffs Nuclear Power Plant. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2005. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include physical protection information. A separate letter designated and marked as "Official Use Only - Security-Related Information" will include the physical protection review and resultant inspection plan.

Overall, Calvert Cliffs Units 1 and 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

While plant performance at Unit 2 for the most recent quarter is within the Licensee Response column of the Action Matrix, there was an inspection finding that resulted in this unit being within the Regulatory Response column through the first quarter 2005. The finding was of low to moderate safety significance (White) in the Mitigating Systems cornerstone, and involved a relay failure that caused the steam dump valves to remain full open following a reactor trip in January 2004. An NRC Supplemental Inspection, conducted in January 2005, determined that the root causes for the performance deficiencies were understood and that completed and planned corrective actions were reasonable to address the related causes.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through September 30, 2007. Planned inspections include reactor vessel head replacement inspections at both units and an independent spent fuel storage installation inspection. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections

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in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Mr. Brian McDermott at 610-337-5233 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

**/RA/**

Brian E. Holian, Director  
Division of Reactor Projects, Region 1

Docket Nos. 50-317, 50-318  
License Nos. DPR-53, DPR-69

Enclosure: Calvert Cliffs Inspection/ Activity Plan

cc w/encl:

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SISP Review Complete: JMT (Reviewer's Initials)

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OFFICE	RI/DRP	RI/DRP	RI/DRP
NAME	CKhan/JMT for	JTrapp/JMT	BHolian/BEH
DATE	02/28/06	02/28/06	03/01/06

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**Calvert Cliffs**  
**Inspection / Activity Plan**  
**03/01/2006 - 09/30/2007**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>71007</b>	<b>- U1 REACTOR VESSEL HEAD REPLACEMENT</b>	<b>2</b>			
1	IP 71007	Reactor Vessel Head Replacement Inspection		01/09/2006	04/30/2006	Other Routine
1	IP 7111102	Evaluation of Changes, Tests, or Experiments		03/06/2006	03/08/2006	Baseline Inspections
1	IP 7111117B	Permanent Plant Modifications		03/06/2006	03/08/2006	Baseline Inspections
1	IP 71007	Reactor Vessel Head Replacement Inspection		03/10/2006	03/24/2006	Other Routine
	<b>71121</b>	<b>- OCC RADIATION SAFETY</b>	<b>1</b>			
1	IP 71007	Reactor Vessel Head Replacement Inspection		02/27/2006	03/03/2006	Other Routine
1,2	IP 7112101	Access Control to Radiologically Significant Areas		02/27/2006	03/03/2006	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		02/27/2006	03/03/2006	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		02/27/2006	03/03/2006	Baseline Inspections
1	IP 71151	Performance Indicator Verification		02/27/2006	03/03/2006	Baseline Inspections
	<b>7111108P</b>	<b>- INSERVICE INSPECTION - UNIT 1</b>	<b>2</b>			
1	IP 7111108P	Inservice Inspection Activities - PWR		02/27/2006	03/03/2006	Baseline Inspections
1	IP 2515/160	Pzr Pene Nozzles & Stm Space Piping Connections in U.S. PWRs [NRC Bulletin 2004-01]		03/06/2006	03/10/2006	Safety Issues
1	IP 7111108P	Inservice Inspection Activities - PWR		03/13/2006	03/17/2006	Baseline Inspections
	<b>8/28 EXM</b>	<b>- OPERATOR LICENSING INITIAL EXAMS</b>	<b>3</b>			
1	U01585	CALVERT CLIFFS INITIAL EXAM (3/06)		07/24/2006	07/28/2006	Not Applicable
1	U01585	CALVERT CLIFFS INITIAL EXAM (3/06)		08/28/2006	09/01/2006	Not Applicable
	<b>71121</b>	<b>- OCC RAD SAFETY</b>	<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		04/17/2006	04/21/2006	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		04/17/2006	04/21/2006	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		04/17/2006	04/21/2006	Baseline Inspections
2	IP 71151	Performance Indicator Verification		04/17/2006	04/21/2006	Baseline Inspections
	<b>ISFSI</b>	<b>- ISFSI</b>	<b>2</b>			
1,2	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants		05/01/2006	08/31/2006	Other Routine
	<b>7111121</b>	<b>- CDBI (COMPONENT DESIGN BASES INSPECTION)</b>	<b>8</b>			
1,2	IP 7111121	Component Design Bases Inspection		07/17/2006	07/21/2006	Baseline Inspections
1,2	IP 7111121	Component Design Bases Inspection		07/31/2006	08/04/2006	Baseline Inspections
1,2	IP 7111121	Component Design Bases Inspection		08/14/2006	08/18/2006	Baseline Inspections
1,2	IP 7111121	Component Design Bases Inspection		08/21/2006	08/25/2006	Baseline Inspections
	<b>7112203</b>	<b>- PUB RAD SAFETY - REMP</b>	<b>1</b>			
1,2	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control P		07/31/2006	08/04/2006	Baseline Inspections
1	IP 71151	Performance Indicator Verification		07/31/2006	08/04/2006	Baseline Inspections
	<b>71121</b>	<b>- OCC RAD SAFETY</b>	<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		09/11/2006	09/15/2006	Baseline Inspections

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

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	<b>71121</b>	<b>- OCC RAD SAFETY</b>	<b>1</b>			
1,2	IP 7112102	ALARA Planning and Controls		09/11/2006	09/15/2006	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		09/11/2006	09/15/2006	Baseline Inspections
2	IP 71151	Performance Indicator Verification		09/11/2006	09/15/2006	Baseline Inspections
	<b>71007</b>	<b>- U2 RX VESSEL HEAD REPLACEMENT</b>	<b>1</b>			
2	IP 71007	Reactor Vessel Head Replacement Inspection		01/01/2007	04/10/2007	Other Routine
	<b>71114</b>	<b>- EP PRGM INSP &amp; PI VERIFICATION</b>	<b>1</b>			
1,2	IP 7111403	Emergency Response Organization Augmentation Testing		11/27/2006	12/01/2006	Baseline Inspections
1,2	IP 7111404	Emergency Action Level and Emergency Plan Changes		11/27/2006	12/01/2006	Baseline Inspections
1,2	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		11/27/2006	12/01/2006	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		11/27/2006	12/01/2006	Baseline Inspections
	<b>71121</b>	<b>- OCC RAD SAFETY</b>	<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		01/15/2007	01/19/2007	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		01/15/2007	01/19/2007	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		01/15/2007	01/19/2007	Baseline Inspections
1	IP 71151	Performance Indicator Verification		01/15/2007	01/19/2007	Baseline Inspections
	<b>71121</b>	<b>- OCC RAD PROT</b>	<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		03/05/2007	03/09/2007	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		03/05/2007	03/09/2007	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		03/05/2007	03/09/2007	Baseline Inspections
2	IP 71151	Performance Indicator Verification		03/05/2007	03/09/2007	Baseline Inspections
	<b>7111108P</b>	<b>- IN SERVICE INSPECTION</b>	<b>1</b>			
2	IP 7111108P	Inservice Inspection Activities - PWR		03/05/2007	03/16/2007	Baseline Inspections
	<b>MODS</b>	<b>- MODS &amp; 50.59</b>	<b>3</b>			
1,2	IP 7111102	Evaluation of Changes, Tests, or Experiments		04/16/2007	04/20/2007	Baseline Inspections
1,2	IP 711117B	Permanent Plant Modifications		04/16/2007	04/20/2007	Baseline Inspections
	<b>7112202</b>	<b>- PUB RAD SAFETY - RETS</b>	<b>1</b>			
1,2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		05/28/2007	06/01/2007	Baseline Inspections
1	IP 71151	Performance Indicator Verification		05/28/2007	06/01/2007	Baseline Inspections
	<b>TRI FIRE</b>	<b>- TRIENNIAL FIRE PROTECTION INSPECTION</b>	<b>3</b>			
1,2	IP 7111105T	Fire Protection [Triennial]		06/11/2007	06/15/2007	Baseline Inspections
1,2	IP 7111105T	Fire Protection [Triennial]		06/25/2007	06/29/2007	Baseline Inspections
	<b>71121</b>	<b>- OCC RAD SAFETY</b>	<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		08/06/2007	08/10/2007	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		08/06/2007	08/10/2007	Baseline Inspections

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1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		08/06/2007	08/10/2007	Baseline Inspections
2	IP 71151	Performance Indicator Verification		08/06/2007	08/10/2007	Baseline Inspections
	<b>71152B</b>	<b>- PI&amp;R</b>	<b>4</b>			
1,2	IP 71152B	Identification and Resolution of Problems		08/27/2007	08/31/2007	Baseline Inspections
1,2	IP 71152B	Identification and Resolution of Problems		09/10/2007	09/14/2007	Baseline Inspections