



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

August 31, 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: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN - CALVERT  
CLIFFS NUCLEAR POWER PLANT

Dear Mr. Spina:

On August 9, 2006, the NRC staff completed its performance review of Calvert Cliffs Nuclear Power Plant for the first half of the calendar year 2006 assessment cycle. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results over the previous twelve months. 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 "Exempt from Public Disclosure in accordance with 10 CFR 2.390" will include the physical protection review and resultant inspection plan.

Plant performance for the most recent quarter at Calvert Cliffs Units 1 and 2 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. We also plan to conduct several infrequent ROP inspections to assess activities related to your operation of an independent spent fuel storage installation and replacement of the reactor vessel head at Unit 2.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through March 31, 2008. 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 in the last nine months of the inspection plan are tentative and may be revised at the end-of-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 the inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at 610-337-5233 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

**/RA/**

Brian J. McDermott, Chief  
Projects Branch 1  
Division of Reactor Projects

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

Enclosure: Calvert Cliffs Inspection / Activity Plan

cc w/encl:

M. J. Wallace, President, Constellation Generation  
J. M. Heffley, Senior Vice President and Chief Nuclear Officer  
President, Calvert County Board of Commissioners  
C. W. Fleming, Senior Counsel, Constellation Generation Group, LLC  
Director, Nuclear Regulatory Matters  
R. McLean, Manager, Nuclear Programs  
K. Burger, Esquire, Maryland People's Counsel  
State of Maryland (2)

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

Sincerely,

/RA/

Brian J. McDermott, Chief  
 Projects Branch 1  
 Division of Reactor Projects

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

Distribution w/encl:  
 S. Collins, RA  
 M. Dapas, DRA  
 B. Sosa, RI OEDO  
 R. Laufer, NRR  
 P. Milano, PM, NRR  
 R. Guzman, PM, NRR (Backup)  
 B. McDermott, DRP  
 A. Burritt, DRP  
 J. Giessner, DRP, SRI  
 M. Davis, DRP, RI  
 C. Newgent - Resident OA

Region I Docket Room (with concurrences)  
 D. Screnci, PAO  
 N. Sheenhan, PAO  
 DRS Director  
 DRS Deputy Director  
 DRS Branch Chiefs  
[RidsNrrDiplipb@nrs.gov](mailto:RidsNrrDiplipb@nrs.gov)  
 Institute of Nuclear Power Operations  
 (INPO)

**SUNSI Review Complete:**          ALB          **(Reviewer's Initials)**

DOCUMENT NAME:S:\ROP 7 Mid Cycle Review\2006 ROP7 Mid-Cycle Letters\Calvert ROP-7 Mid-Cycle Ltr.wpd

After declaring this document "An Official Agency Record" it will be released to the Public.  
**To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure**  
**"E" = Copy with attachment/enclosure "N" = No copy**

OFFICE	RI/DRP	RI/DRP	RI/DRP
NAME	JGiessner/ALB FOR	ABurritt	BMcDermott
DATE	08/24/06	08/24/06	08/28/06

OFFICIAL RECORD COPY

**Calvert Cliffs**  
**Inspection / Activity Plan**  
**07/01/2006 - 03/31/2008**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>8/28 EXM - OPERATOR LICENSING INITIAL EXAMS</b>		<b>4</b>			
1	U01585	CALVERT CLIFFS INITIAL EXAM (3/06)		07/24/2006	08/04/2006	Not Applicable
1	U01585	CALVERT CLIFFS INITIAL EXAM (3/06)		08/28/2006	09/01/2006	Not Applicable
	<b>A-DIESEL - FOLLOW UP TO MARCH 2006 1A- DIESEL EVENT</b>		<b>3</b>			
1	IP 71153	Followup of Events and Notices of Enforcement Discretion		06/26/2006	08/15/2006	Baseline Inspections
	<b>7111121 - CDBI (COMPONENT DESIGN BASES INSPECTION)</b>		<b>7</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 - PUB RAD SAFETY - REMP</b>		<b>2</b>			
1,2	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Pr		07/31/2006	08/04/2006	Baseline Inspections
1	IP 71151	Performance Indicator Verification		07/31/2006	08/04/2006	Baseline Inspections
	<b>71121 - OCC RAD SAFETY</b>		<b>2</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		09/11/2006	09/15/2006	Baseline Inspections
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>TI 169 - MSPI VERIFICATION</b>		<b>1</b>			
1,2	IP 2515/169	Mitigating Systems Performance Index Verification		10/01/2006	12/31/2006	Safety Issues
	<b>60855.1 - OPERATION OF AN ISFSI</b>		<b>3</b>			
1,2	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants		11/06/2006	11/08/2006	Other Routine
	<b>71007 - 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 - EP PRGM INSP &amp; PI VERIFICATION</b>		<b>1</b>			
1,2	IP 7111403	Emergency Response Organization Augmentation Testing		12/03/2006	12/08/2006	Baseline Inspections
1,2	IP 7111404	Emergency Action Level and Emergency Plan Changes		12/03/2006	12/08/2006	Baseline Inspections
1,2	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		12/03/2006	12/08/2006	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		12/03/2006	12/08/2006	Baseline Inspections
	<b>71121 - 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

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

**Calvert Cliffs**  
**Inspection / Activity Plan**  
**07/01/2006 - 03/31/2008**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<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>TI-166</b>	<b>- CONTAINMENT SUMP MODIFICATIONS</b>	<b>1</b>			
2	IP 2515/166	Pressurized Water Reactor Containment Sump Blockage [NRC GENERIC LETTER 2004-02]		03/26/2007	04/04/2007	Safety Issues
	<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 7111117B	Permanent Plant Modifications		04/16/2007	04/20/2007	Baseline Inspections
	<b>7112201</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
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
	<b>7111111B</b>	<b>- L.O. REQUAL. PROG. + P/F REVIEW</b>	<b>4</b>			
1,2	IP 7111111B	Licensed Operator Requalification Program		11/26/2007	11/30/2007	Baseline Inspections
	<b>7112202</b>	<b>- PUB RAD SAFETY - RADWASTE</b>	<b>1</b>			
1,2	IP 7112202	Radioactive Material Processing and Transportation		10/01/2007	10/05/2007	Baseline Inspections
1	IP 71151	Performance Indicator Verification		10/01/2007	10/05/2007	Baseline Inspections
	<b>7111401</b>	<b>- EP EXERCISE &amp; PI VERIFICATION</b>	<b>4</b>			
1,2	IP 7111401	Exercise Evaluation		10/29/2007	11/02/2007	Baseline Inspections
1,2	IP 71151-EP01	Drill/Exercise Performance		10/29/2007	11/02/2007	Baseline Inspections
1,2	IP 71151-EP02	ERO Drill Participation		10/29/2007	11/02/2007	Baseline Inspections

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

**Calvert Cliffs**  
**Inspection / Activity Plan**  
**07/01/2006 - 03/31/2008**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>7111401 - EP EXERCISE &amp; PI VERIFICATION</b>		<b>4</b>			
1,2	IP 71151-EP03	Alert & Notification System		10/29/2007	11/02/2007	Baseline Inspections
	<b>71121 - OCC RAD SAFETY</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		12/10/2007	12/14/2007	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		12/10/2007	12/14/2007	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		12/10/2007	12/14/2007	Baseline Inspections
2	IP 71151	Performance Indicator Verification		12/10/2007	12/14/2007	Baseline Inspections
	<b>71111.07 - HEAT SINK INSP</b>		<b>1</b>			
1,2	IP 7111107B	Heat Sink Performance		02/04/2008	02/08/2008	Baseline Inspections
	<b>71121 - OCC RAD SAFETY</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		03/10/2008	03/14/2008	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		03/10/2008	03/14/2008	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		03/10/2008	03/14/2008	Baseline Inspections
1	IP 71151	Performance Indicator Verification		03/10/2008	03/14/2008	Baseline Inspections