



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

March 3, 2008

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 (REPORTS 05000317/2008001 AND 05000318/2008001)

Dear Mr. Spina:

On February 12, 2008, the U.S. Nuclear Regulatory Commission (NRC) staff completed its performance review of Calvert Cliffs Nuclear Power Plant (Calvert Cliffs). Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2007. 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 security information. A separate letter designated and marked as "Official Use Only—Security Information" will include the security cornerstone 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 for the most recent quarter was within the Licensee Response column of the Action Matrix, Calvert Cliffs Unit 1 was within the Regulatory Response column of the Action Matrix during the first two quarters of the assessment cycle, based on one finding of low to moderate safety significance (White) identified in September 2006. The White finding involved an incorrect circuit breaker setting that impacted operability of the "1A" emergency diesel generator. The NRC has completed a supplemental inspection in accordance with inspection procedure 95001. The results of that inspection were provided in NRC Supplemental Inspection Report 05000317/2007006. As a result of that review, this finding was closed and no longer considered for plant assessment purposes, effective July 1, 2007.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through June 30, 2009. In addition to baseline inspections, we plan on conducting an independent spent fuel storage installation (ISFSI) 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

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their ongoing and continuous nature. The inspections 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 the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Glenn Dentel of my staff at 610-337-5233, with any questions you may have regarding this letter or the inspection plan.

Sincerely,

**/RA/**

David C. Lew, Director  
Division of Reactor Projects  
Region I

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, Esq., Senior Counsel, Nuclear Generation Group  
J. Gaines, Director, Licensing  
Director, Nuclear Regulatory Matters  
R. McLean, Manager, Nuclear Programs  
K. Burger, Esquire, Maryland People's Counsel  
R. Hickok, NRC Technical Training Center  
S. Pattison, SLO (2)

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David C. Lew, Director  
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S. Pattison, SLO (2)

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See next page

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

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DATE	02/26/08		02/27/08		02/29/08		

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**Calvert Cliffs**  
**Inspection / Activity Plan**  
**01/01/2008 - 06/30/2009**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>6/16 EXM - INITIAL OPERATOR LICENSING EXAMS</b>		<b>4</b>			
1	U01633	CALVERT CLIFFS UNIT 1 & 2 INITIAL EXAM (FY08)		05/19/2008	05/23/2008	Not Applicable
1	U01633	CALVERT CLIFFS UNIT 1 & 2 INITIAL EXAM (FY08)		06/16/2008	06/20/2008	Not Applicable
	<b>71121 - OCC RAD SAFETY</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		02/25/2008	02/29/2008	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		02/25/2008	02/29/2008	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		02/25/2008	02/29/2008	Baseline Inspections
	<b>711108P - U1 INSERVICE INSPECTION</b>		<b>1</b>			
1	IP 7111108P	Inservice Inspection Activities - PWR		02/25/2008	02/29/2008	Baseline Inspections
	<b>TI-172 - U1 TI-172 RCS DISSIMILIAR METAL WELDS</b>		<b>1</b>			
1	IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds		02/25/2008	02/29/2008	Generic Safety Inspectio
	<b>711108P - U1 INSERVICE INSPECTION</b>		<b>1</b>			
1	IP 7111108P	Inservice Inspection Activities - PWR		03/03/2008	03/07/2008	Baseline Inspections
	<b>TI-166 - CONTAINMENT SUMP MODIFICATION INSPECTION</b>		<b>1</b>			
1	IP 2515/166	Pressurized Water Reactor Containment Sump Blockage [NRC GENERIC LETTER 2004-02]		03/03/2008	03/09/2008	Safety Issues
	<b>7112103 - OCC RAD SAFETY - INSTRUMENTS</b>		<b>1</b>			
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		05/19/2008	05/23/2008	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		05/19/2008	05/23/2008	Baseline Inspections
	<b>TI 171 - TI 171</b>		<b>3</b>			
1,2	IP 2515/171	Verification of Site Specific Implementation Of B.5.b Phase 2 & 3 Mitigating Strategies		05/19/2008	05/23/2008	Generic Safety Inspectio
	<b>7111121 - CDBI</b>		<b>6</b>			
1,2	IP 7111121	Component Design Bases Inspection		06/02/2008	06/06/2008	Baseline Inspections
1,2	IP 7111121	Component Design Bases Inspection		06/16/2008	06/20/2008	Baseline Inspections
1,2	IP 7111121	Component Design Bases Inspection		06/23/2008	06/27/2008	Baseline Inspections
	<b>7112201 - PUB RAD SAFETY - RETS</b>		<b>1</b>			
1,2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		06/16/2008	06/20/2008	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		06/16/2008	06/20/2008	Baseline Inspections
	<b>71121 - OCC RAD SAFETY</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		08/25/2008	08/29/2008	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		08/25/2008	08/29/2008	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		08/25/2008	08/29/2008	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		08/25/2008	08/29/2008	Baseline Inspections
	<b>ISFSI - ISFSI - ANNUAL SAMPLE</b>		<b>1</b>			
1	IP 60855	Operation Of An ISFSI		08/25/2008	08/29/2008	Other Routine

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

**Calvert Cliffs**  
**Inspection / Activity Plan**  
**01/01/2008 - 06/30/2009**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>71121 - OCC RAD SAFETY</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		11/03/2008	11/07/2008	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		11/03/2008	11/07/2008	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		11/03/2008	11/07/2008	Baseline Inspections
	<b>EP - EP PROGRAM INSP</b>		<b>2</b>			
1,2	IP 7111402	Alert and Notification System Testing		11/17/2008	11/21/2008	EP Baseline Inspection
1,2	IP 7111403	Emergency Response Organization Augmentation Testing		11/17/2008	11/21/2008	EP Baseline Inspection
1,2	IP 7111404	Emergency Action Level and Emergency Plan Changes		11/17/2008	11/21/2008	EP Baseline Inspection
1,2	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		11/17/2008	11/21/2008	EP Baseline Inspection
1,2	IP 71151-EP01	Drill/Exercise Performance		11/17/2008	11/21/2008	Baseline Inspections
1,2	IP 71151-EP02	ERO Drill Participation		11/17/2008	11/21/2008	Baseline Inspections
1,2	IP 71151-EP03	Alert & Notification System		11/17/2008	11/21/2008	Baseline Inspections
	<b>71121 - OCC RAD SAFETY</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		01/19/2009	01/23/2009	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		01/19/2009	01/23/2009	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		01/19/2009	01/23/2009	Baseline Inspections
1,2	IP 71151-OR01	Occupational Exposure Control Effectiveness		01/19/2009	01/23/2009	Baseline Inspections
	<b>71121 - OCC RAD SAFETY</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		03/02/2009	03/06/2009	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		03/02/2009	03/06/2009	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		03/02/2009	03/06/2009	Baseline Inspections
1,2	IP 71151-OR01	Occupational Exposure Control Effectiveness		03/02/2009	03/06/2009	Baseline Inspections
	<b>711108P - U2 INSERVICE INSPECTION</b>		<b>1</b>			
2	IP 7111108P	Inservice Inspection Activities - PWR		03/02/2009	03/06/2009	Baseline Inspections
	<b>TI-172 - TI-172 RCS DISSIMILIAR METAL WELDS</b>		<b>1</b>			
2	IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds		03/02/2009	03/06/2009	Generic Safety Inspectio
	<b>711108P - U2 INSERVICE INSPECTION</b>		<b>1</b>			
2	IP 7111108P	Inservice Inspection Activities - PWR		03/16/2009	03/20/2009	Baseline Inspections
	<b>ISFSI - ISFSI INSPECTION - ANNUAL SAMPLE</b>		<b>2</b>			
1	IP 60855	Operation Of An ISFSI		04/01/2009	06/30/2009	Other Routine
	<b>MODS - PERMANENT PLANT MODIFICATIONS</b>		<b>3</b>			
1,2	IP 7111117B	Evaluations of Changes, Tests, or Experiments & Permanent Plant Modifications		04/20/2009	04/24/2009	Baseline Inspections
1,2	IP 7111117B	Evaluations of Changes, Tests, or Experiments & Permanent Plant Modifications		05/04/2009	05/08/2009	Baseline Inspections
	<b>711107B - HEAT SINK INSP</b>		<b>1</b>			
1,2	IP 7111107B	Heat Sink Performance		06/01/2009	06/05/2009	Baseline Inspections

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Calvert Cliffs  
Inspection / Activity Plan  
01/01/2008 - 06/30/2009

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	7112202	- PUB RAD SAFETY - RADWASTE	1		
1, 2	IP 7112202	Radioactive Material Processing and Transportation		06/15/2009    06/19/2009	Baseline Inspections

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