



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

March 3, 2010

Mr. George H. Gellrich, 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 05000317/2010001 AND 05000318/2010001)

Dear Mr. Gellrich:

On February 12, 2010, the 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, 2009. 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 at Calvert Cliffs Units 1 and 2 was within the Regulatory Response column of the NRC's Action Matrix, based on one finding having low to moderate safety significance (White). This finding involved Calvert Cliff's emergency action level table's fission product barrier matrix being incorrect resulting in a degraded risk significant planning standard function. On December 4, 2009, we completed a supplemental inspection pursuant to Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," and the inspection report (ML100150225)¹ was issued on January 15, 2010. The inspection revealed no additional findings of safety significance and closed the White Emergency Preparedness inspection finding. Therefore, this finding has been removed from consideration in the performance assessment process in the first quarter of 2010.

The enclosed inspection plan details the inspections, less those related to security, scheduled through June 30, 2011. 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 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.

¹Designation in parenthesis refers to an ADAMS accession number. Documents referenced in this letter are publicly available using the accession number in ADAMS.

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 Glenn Dentel of my staff at 610-337-5233 with any questions you may have regarding this letter or the inspection plan.

Sincerely,



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: Distribution via ListServ

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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

S. Collins, RA (R1ORAMAIL RESOURCE)
M. Dapas, DRA (R1ORAMAIL RESOURCE)
D. Lew, DRP (R1DRPMAIL RESOURCE)
J. Clifford, DRP (R1DRPMAIL RESOURCE)
D. Roberts, DRS (R1DRSMail Resource)
P. Wilson, DRS (R1DRSMail Resource)
L. Trocine, RI OEDO
G. Dentel, DRP
N. Perry, DRP
J. Hawkins, DRP
S. Sloan, DRP
S. Kennedy, DRP, SRI

M. Davis, DRP, RI
C. Newgent, DRP, Resident OA
RidsNrrPMCalvertCliffs Resource
RidsNrrDorLp1-1 Resource
ROPreportsResource@nrc.gov
DRS Branch Chiefs (6)
L. Scholl, DRS
S. Barr, DRS
J. Trapp, DRS
D. Silk, DRS
D. Screnci, PAO
N. Sheehan, PAO
R. Barkley, ORA

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OFFICE	RI/DRP		RI/DRP		RI/DRP	
NAME	NPerry/NP		GDentel/GTD		DLew/DCS	
DATE	02/22/2010		02/23/2010		03/01/2010	

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Calvert Cliffs

Inspection / Activity Plan

01/01/2010 - 06/30/2011

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1, 2	01/11/2010 01/15/2010	TI-177 IP 2515/177	- MANAGING GAS ACCUMULATION IN ECCS Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal & Containment Spray System	3
1, 2	01/25/2010 01/29/2010	71124 IP 71124.01	- RADIATION SAFETY Radiological Hazard Assessment and Exposure Controls	1
1, 2	01/25/2010 01/29/2010	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	03/01/2010 03/05/2010	71124 IP 71124.01	- RADIATION SAFETY Radiological Hazard Assessment and Exposure Controls	1
1, 2	03/01/2010 03/05/2010	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	03/01/2010 03/05/2010	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/01/2010 03/05/2010	IP 71124.04	Occupational Dose Assessment	
1, 2	03/01/2010 03/05/2010	IP 71124.05	Radiation Monitoring Instrumentation	
1	03/01/2010 03/12/2010	7111108P IP 7111108P	- UNIT 1 INSERVICE INSPECTION Inservice Inspection Activities - PWR	1
1	03/01/2010 03/12/2010	TI-172 IP 2515/172	- U1 TI 2515/172 DISSIMILAR METAL WELDS Reactor Coolant System Dissimilar Metal Butt Welds	1
1	06/28/2010 07/02/2010	8/2EXAM U01770	- OPERATOR LICENSING INITIAL EXAMS FY10 - CALVERT CLIFFS UNIT 1&2 INITIAL OPERATOR LICENSING EXAM	4
1	08/02/2010 08/13/2010	U01770	FY10 - CALVERT CLIFFS UNIT 1&2 INITIAL OPERATOR LICENSING EXAM	
1, 2	05/03/2010 05/07/2010	71124.05 IP 71124.05	- RAD MONITORING INSTRUMENTS Radiation Monitoring Instrumentation	1
1, 2	06/07/2010 06/11/2010	71124.06 IP 71124.06	- RAD GAS & LIQ EFFLUENTS SYSTEM Radioactive Gaseous and Liquid Effluent Treatment	1
1, 2	06/07/2010 06/11/2010	2515/173 IP 2515/173	- INDUSTRY GROUND WATER INITIATIVE Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative	1
1, 2	07/12/2010 07/16/2010	ISFSI IP 60855	- ISFSI LOADING CAMPAIGN Operation Of An ISFSI	1
1, 2	07/12/2010 07/16/2010	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
1, 2	08/02/2010 08/06/2010	EP PROGR IP 7111402	- EP PROGRAM INSPECTION Radiological Environmental Monitoring Program	1
1, 2	08/02/2010 08/06/2010	IP 7111403	Emergency Response Organization Augmentation Testing	
1, 2	08/02/2010 08/06/2010	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	08/02/2010 08/06/2010	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	08/02/2010 08/06/2010	IP 71151-EP01	Drill/Exercise Performance	
1, 2	08/02/2010 08/06/2010	IP 71151-EP02	ERO Drill Participation	
1, 2	08/02/2010 08/06/2010	IP 71151-EP03	Alert & Notification System	

This report does not include INPO and OUTAGE activities.

This report shows only on-site and announced inspection procedures.

Calvert Cliffs
 Inspection / Activity Plan
 01/01/2010 - 06/30/2011

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1,2	11/15/2010 11/19/2010	IP 7111105T	TRI FIRE - TRIENNIAL FIRE PROTECTION INSPECTION Fire Protection [Triennial]	3
1,2	11/29/2010 12/03/2010	IP 7111105T	Fire Protection [Triennial]	
1,2	12/06/2010 12/10/2010	IP 60855.1	71124 - RAD SAFETY - RAD HAZARD/ALARA & ISFSI Operation of an Independent Spent Fuel Storage Installation at Operating Plants	1
1,2	12/06/2010 12/10/2010	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	12/06/2010 12/10/2010	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	12/06/2010 12/10/2010	IP 71151	Performance Indicator Verification	
1,2	01/24/2011 01/28/2011	IP 71124.08	71124.08 - RAD MATERIAL AND TRANSPORTATION Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	1
2	02/28/2011 03/11/2011	IP 2515/172	2515/172 - TI 2515/172 RCS DM WELDS Reactor Coolant System Dissimilar Metal Butt Welds	1
2	02/28/2011 03/11/2011	IP 7111108P	7111108P - U2 INSERVICE INSPECTION Inservice Inspection Activities - PWR	1
1,2	03/07/2011 03/11/2011	IP 71124.01	71124.01 - RAD HAZARD ASSESS OUT, ALARA, AIR, DOSE Radiological Hazard Assessment and Exposure Controls	1
1,2	03/07/2011 03/11/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	03/07/2011 03/11/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	03/07/2011 03/11/2011	IP 71124.04	Occupational Dose Assessment	
1,2	03/07/2011 03/11/2011	IP 71124.05	Radiation Monitoring Instrumentation	
1	05/16/2011 05/20/2011	IP 7111107T	7111107T - TRIENNIAL HEAT SINK Heat Sink Performance	1
2	05/16/2011 05/20/2011	IP 7111107T	7111107T - TRIENNIAL HEAT SINK Heat Sink Performance	1
1,2	06/27/2011 07/01/2011	IP 7111117	7111117 - PERMANENT PLANT MODIFICATIONS Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	3

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 This report shows only on-site and announced inspection procedures.