



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

March 4, 2011

George H. Gellrich, Vice President
Calvert Cliffs Nuclear Power Plant, LLC
Constellation Energy Nuclear Group, LLC
1650 Calvert Cliffs Parkway
Lusby, Maryland 20657-4702

SUBJECT: ANNUAL ASSESSMENT LETTER FOR CALVERT CLIFFS NUCLEAR POWER
PLANT (REPORT 05000317/2010001 AND 05000318/2010001)

Dear Mr. Gellrich:

On February 9, 2011, the Nuclear Regulatory Commission (NRC) completed its end-of-cycle performance review of Calvert Cliffs Nuclear Power Plant (Calvert Cliffs), Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from January 1, 2010, through December 31, 2010. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information. A separate letter will include the NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

The NRC determined that overall, Calvert Cliffs Units 1 and 2 operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Calvert Cliffs Unit 1 during the most recent quarter was within the Licensee Response column of the NRC's Reactor Oversight Process (ROP) Action Matrix, because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at Calvert Cliffs Unit 1. The NRC determined the performance at Calvert Cliffs Unit 2 during the most recent quarter was within the Regulatory Response column of the NRC's ROP Action Matrix because of one finding having low to moderate (i.e., white) safety significance in the Mitigating Systems cornerstone, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). The finding involved the failure to develop and implement scheduled preventative maintenance for safety-related time delay relays that are used in the protective logic for the 2B Emergency Diesel Generator (EDG). This resulted in a failure of the time delay relay which caused the 2B EDG to trip prematurely when called upon to energize the 24.4 kV safety bus during an event on February 18, 2010.

On February 11, 2011, your staff notified the NRC of your readiness for us to conduct a supplemental inspection to review the actions taken to address the performance issues. Therefore, in addition to ROP baseline inspections, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," beginning on March 16, 2011, at Calvert Cliffs Unit 2. This inspection procedure will be conducted to provide assurance that the root cause and

contributing causes of the risk significant performance issues are understood, the extent of condition is identified, and the corrective actions are sufficient to prevent reoccurrence.

The enclosed inspection plan lists the inspections scheduled through June 30, 2012. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be 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).

Please contact Glenn Dentel of my staff at 610-337-5233 with any questions you have regarding this letter.

Sincerely,



Darrell J. Roberts, Director
Division of Reactor Projects

Docket Nos. 50-317, 50-318
License Nos. DPR-53, DPR-54

Enclosure: Calvert Cliffs Inspection / Activity Plan

cc w/encl: Distribution via ListServ

contributing causes of the risk significant performance issues are understood, the extent of condition is identified, and the corrective actions are sufficient to prevent reoccurrence.

The enclosed inspection plan lists the inspections scheduled through June 30, 2012. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be 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).

Please contact Glenn Dentel of my staff at 610-337-5233 with any questions you have regarding this letter.

Sincerely,

/RA/

Darrell J. Roberts, Director
Division of Reactor Projects

Docket Nos. 50-317, 50-318
License Nos. DPR-53, DPR-54

Enclosure: Calvert Cliffs Inspection / Activity Plan

Distribution w/encl: (via email)

W. Dean, RA
D. Lew, DRA
D. Roberts, DRP
J. Clifford, DRP
P. Wilson, DRS
J. Trapp, RI OEDO
G. Dentel, DRP
N. Perry, DRP
J. Hawkins, DRP

K. Cronk, DRP
N. Floyd, DRP
S. Kennedy, DRP, SRI
M. Osborn, DRP, RI
C. Newgent, DRP, Resident OA
DRS Branch Chiefs
D. Screnci, PAO
N. Sheehan, PAO
R. Barkley, ORA

N. McNamara, SLO
D. Tift, SLO
RidsNrrPMCalvertCliffsResource
RidsNrrDorLp1-1 Resource
ROPreportsResource
ROAssessmentResource
RidsNrrDirspab@nrc.gov

SUNSI Review Complete: ACP (Reviewer's Initials)

DOCUMENT NAME: S:\ROP-11 EOC Review\Branch 1\CC AA Letter.docx

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

ML110620116

OFFICE	RI/DRP	lhp	RI/DRP	RI/DRP
NAME	APatel/ACP		GDentel/GTD	DRoberts
DATE	02/23/11		02/25/11	03/04/11

OFFICIAL RECORD COPY

Calvert Cliffs

Inspection / Activity Plan

01/01/2011 - 06/30/2012

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1	01/04/2011 01/05/2011	1/19EXM - CALVERT CLIFFS JPM RETAKE EXAM U01839	FY11-CALVERT CLIFFS, JPM RETAKE OL EXAM	1
1	01/19/2011 01/20/2011	U01839	FY11-CALVERT CLIFFS, JPM RETAKE OL EXAM	
2	03/14/2011 03/18/2011	INSP - SUPPLEMENTAL FOR UNIT 2 EDG FAILURE IP 95001	Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area	2
2	02/28/2011 03/11/2011	7111108P - U2 INSERVICE INSPECTION IP 7111108P	Inservice Inspection Activities - PWR	1
1,2	03/07/2011 03/11/2011	71124.01 - RAD HAZARD ASSESS OUT, ALARA, AIR, DOSE IP 71124.01	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	
1,2	04/11/2011 04/15/2011	71124.08 - RAD MATERIAL AND TRANSPORTATION IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	1
1,2	05/16/2011 05/20/2011	7111107T - TRIENNIAL HEAT SINK IP 7111107T	Heat Sink Performance	1
1,2	06/27/2011 07/01/2011	7111117 - PERMANENT PLANT MODIFICATIONS IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	3
1,2	07/11/2011 07/15/2011	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
1,2	07/11/2011 07/15/2011	71124.07 - REMP IP 71124.07	Radiological Environmental Monitoring Program	1
1	07/11/2011 07/15/2011	IP 71151-PR01	RETS/ODCM Radiological Effluent	
1,2	08/29/2011 09/02/2011	71124.01 - RAD HAZARD ASSESS, ALARA, AIR, DOSE IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	1
1,2	08/29/2011 09/02/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	08/29/2011 09/02/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	08/29/2011 09/02/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	08/29/2011 09/02/2011	IP 71124.04	Occupational Dose Assessment	
1,2	08/29/2011 09/02/2011	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	09/12/2011 09/16/2011	EP EX - EP EXERCISE INSPECTION IP 7111401	Exercise Evaluation	4
1,2	09/12/2011 09/16/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	09/12/2011 09/16/2011	IP 71151-EP01	Drill/Exercise Performance	
1,2	09/12/2011 09/16/2011	IP 71151-EP02	ERO Drill Participation	

This report does not include INPO and OUTAGE activities.

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

Calvert Cliffs

Inspection / Activity Plan

01/01/2011 - 06/30/2012

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1, 2	09/12/2011 09/16/2011	EP EX - EP EXERCISE INSPECTION IP 71151-EP03	Alert & Notification System	4
1, 2	11/14/2011 11/18/2011	711111B - REQUAL INSP W/ P/F RESULTS IP 711111B	Licensed Operator Requalification Program	2
1, 2	10/24/2011 10/28/2011	71152B - PI&R IP 71152B	Identification and Resolution of Problems	4
1, 2	11/14/2011 11/18/2011	IP 71152B	Identification and Resolution of Problems	
1, 2	12/05/2011 12/09/2011	71124.01 - RAD HAZARD ASSESS, ALARA IP 71124.01	Radiological Hazard Assessment and Exposure Controls	1
1, 2	12/05/2011 12/09/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	12/05/2011 12/09/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	12/05/2011 12/09/2011	IP 71124.04	Occupational Dose Assessment	
1, 2	12/05/2011 12/09/2011	IP 71124.05	Radiation Monitoring Instrumentation	
2	12/05/2011 12/09/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	02/13/2012 02/24/2012	7111108P - U1 INSERVICE INSPECTION IP 7111108P	Inservice Inspection Activities - PWR	1
1, 2	03/04/2012 03/08/2012	71124 - RADIATION SAFETY INSPECTION IP 71124.02	Occupational ALARA Planning and Controls	1
1, 2	03/04/2012 03/08/2012	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/04/2012 03/08/2012	IP 71124.04	Occupational Dose Assessment	
1, 2	05/07/2012 05/11/2012	71124.05 - OCC RDA SAFETY-INSTRUMENTS IP 71124.05	Radiation Monitoring Instrumentation	1
1, 2	05/21/2012 05/25/2012	7111121 - CDBI IP 7111121	Component Design Bases Inspection	6
1, 2	06/04/2012 06/08/2012	IP 7111121	Component Design Bases Inspection	
1, 2	06/18/2012 06/22/2012	IP 7111121	Component Design Bases Inspection	