



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

March 2, 2016

Mr. Bryan C. Hanson
Senior Vice President, Exelon Generation Company, LLC
President and Chief Nuclear Officer, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: ANNUAL ASSESSMENT LETTER FOR CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 (REPORT 05000317/2015006 AND 05000318/2015006)

Dear Mr. Hanson:

On February 11, 2016, the U.S. 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, 2015, through December 31, 2015. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

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 Units 1 and 2 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). Calvert Cliffs Unit 2 was in the Regulatory Response Column of the NRC's ROP Action Matrix until the end of first quarter 2015, due to a finding of low to moderate safety significance (White) in the Emergency Preparedness cornerstone as documented in a White Notice of Violation (NOV) and Assessment Follow-Up Letter (ML14297A547¹) dated October 27, 2014. Calvert Cliffs Unit 2 transitioned to the Licensee Response Column at the beginning of second quarter 2015 after a supplemental inspection for the White finding was successfully completed, in accordance with Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," on February 6, 2015, as documented in NRC Supplemental Inspection Report 05000318/2015008 and Assessment Follow-Up Letter (ML15070A127) dated March 10, 2015. Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

¹ Designation in parentheses refers to an Agencywide Documents Access and Management System (ADAMS) Accession Number. Documents referenced in this letter are publicly available using the Accession Number in ADAMS.

The enclosed inspection plan lists the inspections scheduled through December 31, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. In addition to baseline inspections, the NRC will perform Inspection Procedure 60855.1, "Operation of an Independent Spent Fuel Storage Installation at Operating Plants," Inspection Procedure 71003, "Post Approval Site Inspection For License Renewal," and Temporary Instruction 2515-191, "Inspection of the Implementation of Mitigating Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communications/Staffing/Multi-Unit Dose Assessment Plans." 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. This inspection plan does not include security-related inspections, which will be sent via separate, non-publicly available correspondence.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events." This Order requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." This Order requires licensees to have a reliable means of remotely monitoring wide-range spent fuel pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. The audit was completed for Calvert Cliffs Units 1 and 2, and the information gathered will aid staff in development of the Final Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Final Safety Evaluation will be issued. Then, the NRC staff will confirm through inspections the full implementation of the orders mentioned above by performing Temporary Instruction 2515-191, "Inspection of the Implementation of Mitigating Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communications/Staffing/Multi-Unit Dose Assessment Plans." As noted above, this inspection has been scheduled for Calvert Cliffs Units 1 and 2.

B. Hanson

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In accordance with Title 10 of the *Code of Federal Regulations* (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 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 Anthony Dimitriadis at 610-337-6953 with any questions you have regarding this letter.

Sincerely,

/RA/

Michael L. Scott, Director
Division of Reactor Projects

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

Enclosure:
Calvert Cliffs Inspection/Activity Plan

cc w/encl: Distribution via ListServ

B. Hanson

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DOCUMENT NAME: S:\ROP Assessment Meetings\ROP-16 EOC Review\Branch 1\Calvert Cliffs\2015 CC Annual Assessment Ltr.docx
ADAMS Accession No. **ML16061A169**

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OFFICE	RI/DRP	RI/DRP	RI/DRP		
NAME	ARosebroo/AAR	ADimitriadis/AD	MScott/MLS w/edits		
DATE	2/18/16	2/18/16	2/22/16		

OFFICIAL RECORD COPY

Calvert Cliffs
Inspection / Activity Plan
01/01/2016 - 12/31/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			EXM8/8 - CALVERT CLIFFS INITIAL EXAM		4
1	05/16/2016	05/20/2016	U01923	FY16-CC INITIAL OPERATOR LICENSING EXAM	
1	06/13/2016	06/24/2016	U01923	FY16-CC INITIAL OPERATOR LICENSING EXAM	
			ISI - U1 INSERVICE INSPECTION		1
1	02/16/2016	02/19/2016	IP 7111108P	Inservice Inspection Activities - PWR	
1	02/29/2016	03/04/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			BI - RADIOLOGICAL SAFETY - HAZARDS O		1
1, 2	02/22/2016	02/26/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	02/22/2016	02/26/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	02/22/2016	02/26/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
			BI - RADIOLOGICAL SAFETY - AIRBORNE		1
1, 2	05/09/2016	05/13/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
			71003 - U2 LR COMMITMENT INSPECTION - PHASE 2		1
2	05/16/2016	05/20/2016	IP 71003	Post-Approval Site Inspection for License Renewal	
			ISFSI - ISFSI LOADING CAMPAIGN		4
1, 2	08/15/2016	08/19/2016	IP 60855	Operation Of An ISFSI	
1, 2	08/15/2016	08/19/2016	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			BI - RADIOLOGICAL SAFETY - EXT EXPOSURE		1
1, 2	08/22/2016	08/26/2016	IP 71124.04	Occupational Dose Assessment	
			TRI FI - TRIENNIAL FIRE INSPECTION		4
1, 2	09/12/2016	09/16/2016	IP 7111105X	Fire Protection - NFPA 805 (Triennial)	
1, 2	09/26/2016	09/30/2016	IP 7111105X	Fire Protection - NFPA 805 (Triennial)	
			EP - EP PROGRAM INSPECTION		1
1, 2	09/12/2016	09/16/2016	IP 7111402	Alert and Notification System Testing	
1, 2	09/12/2016	09/16/2016	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	09/12/2016	09/16/2016	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
			BI - RADIOLOGICAL SAFETY - ALARA		1
1, 2	10/03/2016	10/07/2016	IP 71124.02	Occupational ALARA Planning and Controls	
			BI - RADIOLOGICAL SAFETY - RAD HAZ & PIV		1
1, 2	12/05/2016	12/09/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	12/05/2016	12/09/2016	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1, 2	12/05/2016	12/09/2016	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	

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

Enclosure

Calvert Cliffs
Inspection / Activity Plan
01/01/2016 - 12/31/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			71124 - RADIATION SAFETY - INSTRUMENTS		1
1, 2	01/09/2017	01/13/2017	IP 71124.05	Radiation Monitoring Instrumentation	
			71124 - RADIATION SAFETY - RETS		1
1, 2	02/06/2017	02/10/2017	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
			7111108P - U2 INSERVICE INSPECTION		1
2	02/21/2017	03/03/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			TI-191 - FUKUSHIMA LESSONS-LEARNED		1
1, 2	04/17/2017	04/21/2017	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			71124 - RADIATION SAFETY - RAD HAZ PIV		1
1, 2	02/27/2017	03/03/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	02/27/2017	03/03/2017	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1, 2	02/27/2017	03/03/2017	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
			71124.08 - RADWASTE		1
1, 2	04/10/2017	04/14/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			MODS - PERMANENT PLANT MODIFICATIONS		3
1, 2	04/24/2017	04/28/2017	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
1, 2	05/08/2017	05/12/2017	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
			7111107T - TRIENNIAL HEAT SINK		1
1, 2	06/12/2017	06/16/2017	IP 7111107T	Heat Sink Performance	
			71152B - PI&R BIENNIAL TEAM INSPECTION		7
1, 2	07/31/2017	08/04/2017	IP 71152B	Problem Identification and Resolution	
1, 2	08/14/2017	08/18/2017	IP 71152B	Problem Identification and Resolution	
			EP - EP EXERCISE EVALUATION		4
1, 2	09/11/2017	09/15/2017	IP 7111401	Exercise Evaluation	
1, 2	09/11/2017	09/15/2017	IP 71151	Performance Indicator Verification	
			7111111B - CC REQUAL INSP WITH P/F RESULTS		2
1, 2	11/13/2017	11/17/2017	IP 7111111B	Licensed Operator Requalification Program	
			71124 - RADIATION SAFETY - REMP		1
1, 2	10/02/2017	10/06/2017	IP 71124.07	Radiological Environmental Monitoring Program	

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