



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

September 2, 2014

Mr. George H. Gellrich
Site Vice President
Calvert Cliffs Nuclear Power Plant
Exelon Generation Company, LLC
1650 Calvert Cliffs Parkway
Lusby, Maryland 20657-4702

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR CALVERT CLIFFS NUCLEAR
POWER PLANT UNITS 1 & 2 (REPORT 05000317/2014006 AND
05000318/2014006)**

Dear Mr. Gellrich:

On August 13, 2014, the U.S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of your Calvert Cliffs Nuclear Power Plant (Calvert Cliffs) Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators in addition to inspection results and enforcement actions from July 1, 2013, through June 30, 2014. 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 Nuclear Power Plant 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 Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all performance indicators demonstrated that your performance was within the nominal, expected range (i.e, green). Therefore, the NRC plans to conduct Reactor Oversight Process baseline inspections at your facility.

Although plant performance was within the Licensee Response Column, the NRC has not yet finalized the significance of a Preliminary White Finding for Unit 2, "Inaccurate EAL Threshold Values Incorporated Into Site EAL Scheme Change,"(Apparent Violation 05000318/2014003-02) contained in Inspection Report 05000317/2014003 and 05000318/2014003 issued on August 8, 2014. The final safety significance determination may affect the NRC's assessment of plant performance and the enclosed inspection plan.

As a result of the Safety Culture Common Language Initiative, the terminology and coding of cross-cutting aspects were revised. All cross-cutting aspects identified during inspections conducted in calendar year 2014 reflect this revision to Inspection Manual Chapter (IMC) 0310. Cross-cutting aspects identified in 2013 using the 2013 terminology were converted to the latest revision in accordance with the cross-reference in IMC 0310 during the mid-cycle assessment review and evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305.

The enclosed inspection plan lists the inspections scheduled through December 31, 2015. 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 end-of-cycle performance review. In addition to baseline inspections, the NRC will perform Inspection Procedure (IP) IP 60855.1, "Operation of an Independent Spent Fuel Storage Installation (ISFSI) at Operating Plants," and IP 71003, "Post-Approval Site Inspection for License Renewal." 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.

Additionally, an NRC audit of licensee efforts towards compliance with Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," is ongoing. This audit includes an onsite component in order for the NRC to evaluate mitigating strategies as described in licensee submittals, and to receive and review information relative to associated open items. This onsite activity will occur in the months prior to a declaration of compliance for the first unit at each site, and will aid staff in development of an ultimate Safety Evaluation for the site. The onsite component at your site has been scheduled for the week of September 8, 2014. A site-specific audit plan for the visit will be provided in advance to allow sufficient time for preparations.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Part 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 the NRC's Agencywide Document Access and Management 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 me at (610) 337-5262 with any questions you have regarding this letter.

Sincerely,

/RA/

Daniel L. Schroeder, Chief
Reactor Projects Branch 1
Division of Reactor Projects

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

Enclosure: Inspection Plan

cc w/encl: Distribution via ListServ

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See next page

DOCUMENT NAME: S:\ROP Assessment Meetings\ROP-15 Mid-Cycle Review\Branch 1\Calvert Cliffs\CC 2014 MC Letter - final.docx
ADAMS ACCESSION NUMBER: **ML14239A543**

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|--|----------------|---|--|---|--|
| <input checked="" type="checkbox"/> SUNSI Review | | <input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive | | <input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available | |
| OFFICE | RI/DRP | RI/DRP | | | |
| NAME | ARosebrook/AAR | DSchroeder/DLS | | | |
| DATE | 08/26/14 | 08/26/14 | | | |

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Letter to George Gellrich from Daniel Schroeder dated September 2, 2014

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR CALVERT CLIFFS NUCLEAR
POWER PLANT UNITS 1 & 2 (REPORT 05000317/2014006 AND
05000318/2014006)

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ROPAssessment Resource
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Calvert Cliffs
Inspection / Activity Plan
07/01/2014 - 12/31/2015

| Unit Number | Planned Dates | | Inspection Activity | Title | No. of Staff on Site |
|-------------|---------------|------------|---|---|----------------------|
| | Start | End | | | |
| | | | 8/25EXAM - INITIAL OL EXAM | | 4 |
| 1 | 07/28/2014 | 08/01/2014 | U01886 | FY14-CALVERT CLIFFS INITIAL OPERATOR LICENSING EXAM | |
| 1 | 08/25/2014 | 09/04/2014 | U01886 | FY14-CALVERT CLIFFS INITIAL OPERATOR LICENSING EXAM | |
| | | | 71003 - U1 LR COMMITMENTS PHASE 2 INSPEC | | 5 |
| 1 | 07/07/2014 | 07/11/2014 | IP 71003 | Post-Approval Site Inspection for License Renewal | |
| | | | ISFSI - ISFSI LOADING INSPECTION | | 3 |
| 1, 2 | 08/18/2014 | 08/22/2014 | IP 60855 | Operation Of An ISFSI | |
| 1, 2 | 08/18/2014 | 08/22/2014 | IP 60855.1 | Operation of an Independent Spent Fuel Storage Installation at Operating Plants | |
| | | | MODS - PERMANENT PLANT MODIFICATIONS | | 6 |
| 1, 2 | 09/22/2014 | 09/26/2014 | IP 7111117T | Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications | |
| 1, 2 | 10/06/2014 | 10/10/2014 | IP 7111117T | Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications | |
| | | | EP PROGR - EP PROGRAM INSPECTION | | 1 |
| 1, 2 | 11/17/2014 | 11/21/2014 | IP 7111402 | Alert and Notification System Testing | |
| 1, 2 | 11/17/2014 | 11/21/2014 | IP 7111403 | Emergency Preparedness Organization Staffing and Augmentation System | |
| 1, 2 | 11/17/2014 | 11/21/2014 | IP 7111405 | Correction of Emergency Preparedness Weaknesses and Deficiencies | |
| | | | 71124 - RADIATION SAFETY RAD INSTRUMENTS | | 1 |
| 1, 2 | 12/01/2014 | 12/05/2014 | IP 71124.01 | Radiological Hazard Assessment and Exposure Controls | |
| 1, 2 | 12/01/2014 | 12/05/2014 | IP 71124.05 | Radiation Monitoring Instrumentation | |
| 1, 2 | 12/01/2014 | 12/05/2014 | IP 71151-OR01 | | |
| 1, 2 | 12/01/2014 | 12/05/2014 | IP 71151-PR01 | | |
| | | | 71124 - RADIATION SAFETY INSPECTION - INSTRUMENT | | 1 |
| 1, 2 | 01/12/2015 | 01/16/2015 | IP 71124.05 | Radiation Monitoring Instrumentation | |
| | | | 71124 - RADIATION SAFETY INSPECTION | | 1 |
| 1, 2 | 02/16/2015 | 02/20/2015 | IP 71124.01 | Radiological Hazard Assessment and Exposure Controls | |
| | | | 7111108P - U2 INSERVICE INSPECTION | | 1 |
| 2 | 02/23/2015 | 03/06/2015 | IP 7111108P | Inservice Inspection Activities - PWR | |
| | | | 71124.08 - RADWASTE | | 1 |
| 1, 2 | 04/06/2015 | 04/10/2015 | IP 71124.08 | Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation | |
| | | | 71124 - RADIATION SAFETY INSPECTION - ALARA | | 1 |
| 1, 2 | 04/27/2015 | 05/01/2015 | IP 71124.02 | Occupational ALARA Planning and Controls | |
| | | | 71124 - RADIATION SAFETY INSPECTION - REMP | | 1 |
| 1, 2 | 06/22/2015 | 06/26/2015 | IP 71124.07 | Radiological Environmental Monitoring Program | |

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
07/01/2014 - 12/31/2015

| Unit Number | Planned Dates | | Inspection Activity | Title | No. of Staff on Site |
|-------------|---------------|------------|---|---|----------------------|
| | Start | End | | | |
| | | | EP - EP EXERCISE | | 8 |
| 1, 2 | 09/14/2015 | 09/18/2015 | IP 7111407 | Exercise Evaluation - Hostile Action (HA) Event | |
| 1, 2 | 09/14/2015 | 09/18/2015 | IP 7111408 | Exercise Evaluation – Scenario Review | |
| | | | PI&R - PI&R - BIENNIAL | | 1 |
| 1, 2 | 09/14/2015 | 09/18/2015 | IP 71152B | Problem Identification and Resolution | |
| 1, 2 | 09/28/2015 | 10/01/2015 | IP 71152B | Problem Identification and Resolution | |
| | | | 711111B - REQUAL INSP W/ P/F RESULTS | | 2 |
| 1, 2 | 11/16/2015 | 11/20/2015 | IP 711111B | Licensed Operator Requalification Program | |
| | | | 71124 - RADIATION SAFETY INSPECTION - DOSE | | 1 |
| 1, 2 | 11/02/2015 | 11/06/2015 | IP 71124.04 | Occupational Dose Assessment | |
| 1, 2 | 11/02/2015 | 11/06/2015 | IP 71151 | Performance Indicator Verification | |
| | | | CDBI - COMPONENT DESIGN BASIS INSPECTION | | 7 |
| 1, 2 | 11/02/2015 | 11/06/2015 | IP 7111121 | Component Design Bases Inspection | |
| 1, 2 | 11/16/2015 | 11/20/2015 | IP 7111121 | Component Design Bases Inspection | |
| 1, 2 | 11/30/2015 | 12/04/2015 | IP 7111121 | Component Design Bases Inspection | |

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