



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

October 9, 2019

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

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 –  
EMERGENCY PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT  
05000317/2019501 AND 05000318/2019501

Dear Mr. Hanson:

On September 19, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Calvert Cliffs Nuclear Power Plant, Units 1 and 2 and discussed the results of this inspection with Mr. Mark Flaherty and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspectors did not identify any finding or violation of more than minor significance.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

**/RA/**

Fred L. Bower, III, Chief  
Plant Support Branch  
Division of Reactor Safety

Docket Nos. 05000317 and 05000318  
License Nos. DPR-53 and DPR-69

Enclosure:  
As stated

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T. Scardino, RAC Chair, FEMA Region III

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 –  
EMERGENCY PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT  
05000317/2019501 AND 05000318/2019501 DATED OCTOBER 9, 2019

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NAME	JAmbrosini via email	MYoung	FBower		
DATE	10/8/19	10/8/19	10/9/19		

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**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Numbers: 05000317 and 05000318

License Numbers: DPR-53 and DPR-69

Report Numbers: 05000317/2019501 and 05000318/2019501

Enterprise Identifier: I-2019-501-0025

Licensee: Exelon Generation Company, LLC

Facility: Calvert Cliffs Nuclear Power Plant, Units 1 and 2

Location: Lusby, MD

Inspection Dates: September 16, 2019 to September 20, 2019

Inspectors: J. Ambrosini, Sr. Emergency Preparedness Inspector  
J. DeBoer, Reactor Inspector  
C. Highley, Resident Inspector  
J. Lilliendahl, Sr Emergency Response Coord  
P. Ott, Operations Engineer

Approved By: Fred L. Bower, III, Chief  
Plant Support Branch  
Division of Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an emergency preparedness biennial exercise inspection at Calvert Cliffs Nuclear Power Plant, Units 1 and 2 in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## **INSPECTION SCOPES**

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## **REACTOR SAFETY**

### 71114.01 - Exercise Evaluation

#### Inspection Review (IP Section 02.01-02.11) (1 Sample)

- (1) The inspectors evaluated the biennial emergency plan exercise. The exercise scenario simulated a large fire in the service water system, a loss of auxiliary feedwater which necessitated once through core cooling, and a steam leak outside of containment on September 17, 2019.

### 71114.04 - Emergency Action Level and Emergency Plan Changes

#### Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The inspectors evaluated the following submitted Emergency Action Level and Emergency Plan changes:
  - 19-10, EP-CE-114-100-F-01, CCNPP Initial Notification Form, Revision E
  - 19-09, EP-AA-1011, Addendum 3, Calvert Cliffs Nuclear Power Plant Emergency Action Levels, Revision 5
  - 18-105, EP-CE-111, Emergency Classifications and Protective Action Recommendation, Revision 6

This evaluation does not constitute NRC approval.

### 71114.08 - Exercise Evaluation Scenario Review

#### Inspection Review (IP Section 02.01 - 02.04) (1 Sample)

- (1) The inspectors reviewed and evaluated the proposed scenario for the biennial emergency plan exercise on August 8, 2019.

## **OTHER ACTIVITIES – BASELINE**

### 71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

EP01: Drill/Exercise Performance (IP Section 02.12) (1 Sample)

(1) July 1, 2018 - June 30, 2019

EP02: ERO Drill Participation (IP Section 02.13) (1 Sample)

(1) July 1, 2018 - June 30, 2019

EP03: Alert & Notification System Reliability (IP Section 02.14) (1 Sample)

(1) July 1, 2018 - June 30, 2019

**INSPECTION RESULTS**

No findings were identified.

**EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On September 19, 2019, the inspectors presented the emergency preparedness biennial exercise inspection results to Mr. Mark Flaherty and other members of the licensee staff.

**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71114.01	Corrective Action Documents	IR 4280072, IR 4280077, IR 4280073, IR 4280317, IR 4280503, IR 4280378, IR 4280510		
	Miscellaneous		Calvert Cliffs Nuclear Power Plant 2019 Emergency Preparedness Biennial Exercise Scenario Package	