



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PA 19406-2713

March 3, 2020

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

SUBJECT: ANNUAL ASSESSMENT LETTER FOR CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 (REPORTS 05000317/2019006 AND 05000318/2019006)

Dear Mr. Hanson:

The NRC has completed its end-of-cycle performance assessment of Calvert Cliffs Nuclear Power Plant (Calvert Cliffs), Units 1 and 2, reviewing performance indicators (PIs), inspection results, and enforcement actions from January 1, 2019 through December 31, 2019. 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 concluded that overall performance at your facility preserved public health and safety.

The NRC determined the performance at Calvert Cliffs, Units 1 and 2, during the most recent quarter was within the Licensee Response Column (Column 1) of the NRC's Reactor Oversight Process (ROP) Action Matrix in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," because all inspection findings had very low safety significance (i.e., Green), and all PIs were within the expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at Calvert Cliffs, Units 1 and 2.

The enclosed inspection plan lists the inspections scheduled through December 31, 2021. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. You should be aware that the agency is pursuing potential changes to the ROP, including changes to engineering inspections (SECY-18-0113, "Recommendations for Modifying the Reactor Oversight Process Engineering Inspections") and other changes to the baseline inspection program described in SECY-19-0067, "Recommendations for Enhancing the Reactor Oversight Process." Should these changes to the ROP be implemented, the engineering and other region-based inspections are subject to change in scope, as well as schedule. Furthermore, all the inspections listed during the last 12 months of the inspection plan are tentative and may be revised. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

In addition to normal baseline inspections, the NRC will be performing Inspection Procedure (IP) 81311, "Physical Security Requirements for Independent Spent Fuel Storage Installations (ISFSI)," IP 60854.1, "Preoperational Testing of ISFSI at Operating Plants," and IP 60855.1, "Operation of an ISFSI at Operating Plants." Lastly, the NRC will perform inspections per Temporary Instruction (TI) 2515/194, "Inspection of the Licensee's Implementation of Industry Initiative Associated with the Open Phase Condition Design Vulnerability in Electrical Power Systems (NRC Bulletin 2012-01)," at your facility.

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."

Please contact me at 610-337-5356 with any questions you have regarding this letter.

Sincerely,

X /RA/

Signed by: Patrick W. Finney

Patrick W. Finney, Acting Chief
Reactor Projects Branch 5
Division of Reactor Projects

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

Enclosure:
Calvert Cliffs Inspection Plan

cc w/ encl: Distribution via LISTSERV®

SUBJECT: ANNUAL ASSESSMENT LETTER FOR CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 (REPORTS 05000317/2019006 AND 05000318/2019006) DATED MARCH 3, 2020

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ADAMS ACCESSION NUMBER: ML20059L674

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OFFICIAL RECORD COPY

IP 22 Inspection Activity Plan Report

Calvert Cliffs

01/01/2020 - 12/31/2021

Unit	Start	End	Activity	CAC	Title	Staff Count
FY20 CALVERT CLIFFS Initial Exam						5
1, 2	01/05/2020	01/11/2020	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	01/26/2020	02/08/2020	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
Access Authorization and Fitness for Duty-CC						2
1, 2	01/06/2020	01/10/2020	IP 71130.01	000733	Access Authorization	
1, 2	01/06/2020	01/10/2020	IP 71130.08	000740	Fitness For Duty Program	
1, 2	03/30/2020	04/03/2020	IP 71130.01	000733	Access Authorization	
1, 2	03/30/2020	04/03/2020	IP 71130.08	000740	Fitness For Duty Program	
ISI - UNIT 1						1
1	02/24/2020	03/06/2020	IP 71111.08P	000702	Inservice Inspection Activities (PWR)	
Radiation Safety - Rad Haz						1
1, 2	02/24/2020	02/28/2020	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	02/24/2020	02/28/2020	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	02/24/2020	02/28/2020	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
TI-194 Open Phase Condition Inspection - CC						2
1, 2	04/13/2020	04/17/2020	TI 2515/194	000512	Inspection of the Licensee's Implementation of Industry Initiative Associated With the Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC Bulletin 2012-01)	
Access Control, Equip Perf, Training-CC						3
1, 2	04/20/2020	04/24/2020	IP 71130.02	000734	Access Control	
1, 2	04/20/2020	04/24/2020	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1, 2	04/20/2020	04/24/2020	IP 71130.07	000739	Security Training	
1, 2	04/20/2020	04/24/2020	IP 71130.09	001656	Security Plan Changes	
1, 2	04/20/2020	04/24/2020	IP 71151	001338	Performance Indicator Verification	
1, 2	04/20/2020	04/24/2020	IP 81311	000831	Physical Security Requirements for Independent Spent Fuel Storage Installations	
50.59 INSPECTION						3
1, 2	06/15/2020	06/19/2020	IP 71111.17T	000709	Evaluations of Changes, Tests, and Experiments	
Radiation Safety - Airborne						1
1, 2	07/13/2020	07/17/2020	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	

This report does not include INPO and OUTAGE activities.

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

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Calvert Cliffs

01/01/2020 - 12/31/2021

Unit	Start	End	Activity	CAC	Title	Staff Count
HEAT SINK						1
1, 2	07/20/2020	07/24/2020	IP 71111.07T	000700	Heat Sink Performance	
Design Basis Assurance Inspection - Programs - Calvert Cliffs Unit 1 and 2						3
1, 2	08/10/2020	08/14/2020	IP 71111.21N.02	001645	Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements	
1, 2	08/24/2020	08/28/2020	IP 71111.21N.02	001645	Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements	
EP PROGRAM INSPECTION - CALVERT CLIFFS						1
1, 2	08/17/2020	08/21/2020	IP 71114.02	000717	Alert and Notification System Testing	
1, 2	08/17/2020	08/21/2020	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
1, 2	08/17/2020	08/21/2020	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1, 2	08/17/2020	08/21/2020	IP 71114.05	000720	Maintenance of Emergency Preparedness	
1, 2	08/17/2020	08/21/2020	IP 71151	001397	Performance Indicator Verification	
Radiation Safety - Dose & PIV						1
1, 2	11/30/2020	12/04/2020	IP 71124.04	000728	Occupational Dose Assessment	
1, 2	11/30/2020	12/04/2020	IP 71151	000746	Performance Indicator Verification	
Radiation Safety - Instruments						1
1, 2	01/18/2021	01/22/2021	IP 71124.05	000729	Radiation Monitoring Instrumentation	
Radiation Safety - Rad Hazards						1
1, 2	03/01/2021	03/05/2021	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
INSERVICE INSPECTION						1
2	03/07/2021	03/20/2021	IP 71111.08P	000702	Inservice Inspection Activities (PWR)	
ISFSI Dry Run & Operational Inspection - CC						2
1, 2	04/19/2021	04/23/2021	IP 60854.1	000589	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants	
1, 2	05/10/2021	05/14/2021	IP 60854.1	000589	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants	
1, 2	06/07/2021	06/11/2021	IP 60854.1	000589	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants	
1, 2	06/21/2021	06/25/2021	IP 60854.1	000589	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants	

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Calvert Cliffs

01/01/2020 - 12/31/2021

Unit	Start	End	Activity	CAC	Title	Staff Count
ISFSI Dry Run & Operational Inspection - CC						2
1, 2	06/28/2021	07/02/2021	IP 60855.1	000590	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
FY21 Calvert Cliffs Initial Examination						4
1, 2	04/26/2021	05/07/2021	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	06/07/2021	06/18/2021	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
Radwaste						1
1, 2	05/03/2021	05/07/2021	IP 71124.08	000732	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
DESIGN BASIS ASSURANCE INSPECTION - TEAMS						4
1, 2	06/06/2021	06/12/2021	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
1, 2	06/20/2021	06/26/2021	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
PI&R BIENNIAL Team Inspection - CC						4
1, 2	08/16/2021	08/20/2021	IP 71152B	000747	Problem Identification and Resolution	
1, 2	08/30/2021	09/03/2021	IP 71152B	000747	Problem Identification and Resolution	
EP Exercise Inspection - Calvert Cliffs						5
1, 2	09/13/2021	09/17/2021	IP 71114.01	000716	Exercise Evaluation	
1, 2	09/13/2021	09/17/2021	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1, 2	09/13/2021	09/17/2021	IP 71151	001397	Performance Indicator Verification	
Radiation Safety - REMP						1
1, 2	09/13/2021	09/17/2021	IP 71124.07	000731	Radiological Environmental Monitoring Program	
Access Control, Protective Strategy, TSR, SPR						4
1, 2	09/20/2021	09/24/2021	IP 71130.02	000734	Access Control	
1, 2	09/20/2021	09/24/2021	IP 71130.05	000737	Protective Strategy Evaluation	
1, 2	09/20/2021	09/24/2021	IP 71130.09	001656	Security Plan Changes	
1, 2	09/20/2021	09/24/2021	IP 71130.14	000743	Review of Power Reactor Target Sets	
1, 2	09/20/2021	09/24/2021	IP 71151	001338	Performance Indicator Verification	
Radiation Safety - RETS & PIV						1
1, 2	10/25/2021	10/29/2021	IP 71124.06	000730	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	10/25/2021	10/29/2021	IP 71151	000746	Performance Indicator Verification	

This report does not include INPO and OUTAGE activities.

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IP 22 Inspection Activity Plan Report

Calvert Cliffs

01/01/2020 - 12/31/2021

Unit	Start	End	Activity	CAC	Title	Staff Count
CC Requal Inspection with P/F Results						2
1, 2	11/15/2021	11/19/2021	IP 71111.11A	000703	Licensed Operator Requalification Program and Licensed Operator Performance	
1, 2	11/15/2021	11/19/2021	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance	