



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE RD, STE 102
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

August 19, 2025

David P. Rhoades
Senior Vice President
Constellation Energy Generation, LLC
President and Chief Nuclear Officer (CNO)
Constellation Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 – INITIAL
OPERATOR LICENSING EXAMINATION REPORT 05000317/2025301 AND
05000318/2025301

Dear David Rhoades:

On June 27, 2025, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Calvert Cliffs Nuclear Power Plant, Units 1 and 2. The enclosed examination report documents the examination results, which were discussed on July 31, 2025, with Pete Moodie, Site Vice President, and other members of your staff.

The examination included the evaluation of ten applicants for instant senior reactor operator licenses. The written and operating examinations were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 12. The license examiners determined that all ten applicants satisfied the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 55, and the appropriate licenses were issued on July 31, 2025.

During the administration of the operating exam, a compromise of exam material occurred that would have affected the equitable and consistent administration of the examination. Specifically, an operator hard card describing trip criteria relevant to the exam was inadvertently left out by Constellation's post-scenario cleanup crew and was seen by an incoming crew of license candidates. The hard card was found by a license candidate and immediately brought to the attention of the Chief Examiner. Constellation determined that the issue was an inadvertent mistake by the cleanup crew and that there was no indication of willfulness. The issue caused the exam to be delayed while Constellation completed their immediate corrective actions, which included a fact finding investigation and human performance review board. After corrective actions were put into place, the operating exam resumed, and the candidates were administered the spare scenario.

The NRC has completed its review of this exam security issue. One Severity Level IV violation without an associated Reactor Oversight Process (ROP) finding is identified in this report. The NRC is treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy. The details of the NCV are in the enclosure of this report. We have determined that additional follow-up inspection for this NCV is not warranted because the cause of the NCV is clearly understood by Constellation, and corrective actions have been taken to address the cause.

If you contest the violation or the severity of the violation documented in this examination report, you should provide a response within 30 days of the date of this examination report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC Senior Resident Inspector at Calvert Cliffs Nuclear Power Plant, Units 1 and 2.

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,

Sarah Elkhiamy, Chief
Operations Branch
Division of Operating Reactor Safety

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

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 – INITIAL OPERATOR LICENSING EXAMINATION REPORT 05000317/2025301 AND 05000318/2025301 DATED AUGUST 19, 2025

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EXAMINATION REPORT

**U.S. NUCLEAR REGULATORY COMMISSION
REGION I**

Docket Numbers: 05000317 and 05000318

License Numbers: DPR-53 and DPR-69

Report Numbers: 05000317/2025301 and 05000318/2025301

Licensee: Constellation Energy Generation, LLC

Enterprise Identifier: L-2025-OLL-0021

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

Location: Lusby, MD

Dates: June 23 - 27, 2025 (Operating Test Administration)
July 2, 2025 (Written Examination Administration)
July 7, 2025 (Licensee Submitted Post-Exam Package)
June 26 - July 1, 2024 (NRC Examination Grading)
July 31, 2025 (Licenses Issued)

Examiners: T. Setzer, Chief Examiner, Operations Branch
B. Dyke, Chief Examiner (Under Instruction)
R. Clagg, Senior Project Engineer
C. Henckel, Operations Engineer
J. Kepley, Operations Examiner

Approved By: Sarah Elkhiamy, Chief
Operations Branch
Division of Operating Reactor Safety

Enclosure

SUMMARY

ER 05000317/2025301 and 05000318/2025301; 06/23/2025 – 06/27/2025; Calvert Cliffs Nuclear Power Plant, Units 1 and 2; Initial Operator Licensing Examination Report.

Four NRC examiners evaluated the competency of ten applicants for instant senior reactor operator licenses. The NRC developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 12.

The written examination was administered by the facility on July 2, 2025. NRC examiners administered the operating tests on June 23 - 27, 2025. The NRC examiners determined that all ten applicants satisfied the requirements of 10 CFR 55, and the appropriate licenses have been issued.

List of Findings and Violations

Violation of NRC Examination Security as Required by 10 CFR 55.49			
Cornerstone	Severity	Cross-cutting Aspect	Report Section
Not Applicable	Severity Level IV NCV 05000317(8)/2025301-01 Open/Closed	Not Applicable	4OA5.5 Other Activities Initial Operator License Examination / Examination Security
A self-revealing, Severity Level IV, Non-Cited Violation (NCV) of 10 CFR 55.49, "Integrity of Examinations and Tests," was identified for Constellation's failure to prevent the compromise of exam materials by allowing exam related material to remain visible to successive operators during an initial license operator exam scenario. Specifically, an Abnormal Operating Procedure (AOP) 2A hard card describing trip criteria for a reactor coolant system leak and steam generator tube rupture was mistakenly left on the simulator control board and was seen by an incoming crew of license candidates.			

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA5 Other Activities Initial Operator License Examination

.1 License Applications

a. Scope

The examiners reviewed all license applications submitted by the licensee to ensure the applications reflected that each applicant satisfied relevant license eligibility requirements. The applications were submitted on NRC Form 398, "Personal Qualification Statement," and NRC Form 396, "Certification of Medical Examination by Facility Licensee." The examiners also audited ten percent of the license applications in detail to confirm that they accurately reflected the subject applicant's qualifications. This audit focused on the applicant's experience and on-the-job training, including control manipulations that provided significant reactivity changes.

b. Findings

No findings were identified.

.2 Operator Knowledge and Performance

a. Examination Scope

On July 2, 2025, the licensee proctored the administration of the written examinations to all applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on July 7, 2025.

The NRC examination team administered the various portions of the operating examination to all applicants on June 23 - 27, 2025. The applicants seeking an instant senior reactor operator license participated in at least two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of ten system tasks, and an administrative test consisting of five administrative tasks.

b. Findings

All ten applicants passed all parts of the operating test and the written examination. For the written examinations, the senior reactor operator applicants' average score was 88.6 percent. The text of the examination questions may be accessed in the Agencywide Documents Access and Management System (ADAMS) system under the accession numbers noted in the Attachment. In accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for two years.

Chapter ES-4.4 of NUREG 1021 requires the licensee to analyze the validity of any written examination questions that were missed by half or more of the applicants. Licensee training staff performed this analysis and forwarded it to the Chief Examiner. There were no post-examination comments provided by the licensee.

.3 Initial Licensing Examination Development

a. Examination Scope

The NRC developed the examinations in accordance with NUREG-1021, Revision 12. All licensee facility training and operations staff involved in examination preparation and validation were listed on a security agreement. The NRC developed the written exam outline and provided it to the licensee on July 2, 2024. The licensee submitted the operating examination outline on January 24, 2025. The licensee submitted the draft examination package on April 9, 2025. The Chief Examiner reviewed the draft examination package against the requirements of NUREG-1021 and provided comments to the exam authors. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of May 27, 2025.

b. Findings

The examiners determined that the written and operating examinations were within the range of acceptability expected for a proposed examination.

No findings were identified.

.4 Simulation Facility Performance

a. Examination Scope

The examiners observed simulator performance with regard to plant fidelity during the examination validation and administration.

b. Findings

No findings were identified.

.5 Examination Security

a. Examination Scope

The examiners reviewed examination security for examination development and during both the onsite preparation week and examination administration week for compliance with NUREG-1021, Revision 12, requirements. Plans for simulator security and applicant control were reviewed and discussed with licensee personnel.

b. Findings

One self-revealing, Severity Level IV NCV was identified.

Violation of NRC Examination Security as Required by 10 CFR 55.49			
Cornerstone	Severity	Cross-cutting Aspect	Report Section
Not Applicable	Severity Level IV NCV 05000317(8)/2025301-01 Open/Closed	Not Applicable	4OA5.5 Other Activities Initial Operator License Examination / Examination Security
<p>A self-revealing, Severity Level IV, Non-Cited Violation (NCV) of 10 CFR 55.49, "Integrity of Examinations and Tests," was identified for Constellation's failure to prevent the compromise of exam materials by allowing exam related material to remain visible to successive operators during an initial license operator exam scenario. Specifically, an Abnormal Operating Procedure (AOP) 2A hard card describing trip criteria for a reactor coolant system leak and steam generator tube rupture was mistakenly left on the simulator control board and was seen by an incoming crew of license candidates.</p>			
<p><u>Description:</u></p> <p>On June 24, 2025, the NRC was scheduled to administer three runs (2a, 2b and 2c) of Crew Dynamic Scenario 2 to candidates of ILT 24-1. After scenario run 2b, Constellation performed a cleanup of exam materials and then brought in the third and final operating crew (2c) for their turn to take the exam. During the pre-scenario walkdown and immediately prior to taking the shift, the At-The-Controls (ATC) operator candidate requested the Chief Examiner review a document that he had found on the control board. The Chief Examiner reviewed the document and determined that it was the AOP 2A hard card, which describes trip criteria for a reactor coolant system leak and steam generator tube rupture. This document had been left on the simulator control board from the prior crew. The removal of this document had been missed in the post-scenario cleanup and was inadvertently left out for the next crew to see.</p> <p>The Chief Examiner reviewed the hard card with the exam team and determined that the AOP 2A hard card revealed specific details of the exam scenario that the crew was about to be tested on. As a result, the Chief Examiner determined that the exam material had been compromised. The exam was delayed, and the candidates sequestered until it could be determined how the issue occurred.</p> <p>Corrective Actions: Constellation performed a "fact finder," performed interviews with involved employees, and convened a human performance review board. Constellation determined that the issue was an inadvertent mistake by the cleanup crew and that there was no indication of willfulness.</p> <p>Corrective Action References: AR 04875914</p>			
<p><u>Performance Assessment:</u></p> <p>The examiners determined that the licensee's failure to prevent the compromise of exam materials by allowing exam related material to remain visible to successive operators during an initial license operator exam scenario was a performance</p>			

deficiency. The examiners determined that this performance deficiency was reasonably within Constellation's ability to foresee and correct and should have been prevented.

The examiners determined that Traditional Enforcement applied because this issue had the potential to impact the regulatory process. Specifically, the revealing of exam materials to license candidates could cause the NRC to make an incorrect licensing decision by granting an individual an operator or senior operator license for which they are not minimally competent to hold. There was no indication of willfulness associated with this issue. Because the underlying performance deficiency was minor, no associated ROP finding was identified.

Enforcement:

The ROP's significance determination process does not specifically consider regulatory process impact in its assessment of licensee performance. Therefore, it is necessary to address this violation which impedes the NRC's ability to regulate using Traditional Enforcement to adequately deter non-compliance.

Severity: The examiners screened the performance deficiency for significance in accordance with Section 6.4.d of the NRC Enforcement Policy and determined that it was similar to the Severity Level IV, example 6.4.d.1. Specifically, this was an example of a nonwillful compromise of exam materials required by 10 CFR 55 that did not contribute to the NRC making an incorrect regulatory decision.

Violation: 10 CFR 55.49 states that applicants, licensees, and facility licensees shall not engage in any activity that compromises the integrity of any application, test, or examination required by this part. The integrity of a test or examination is considered compromised if any activity, regardless of intent, affected, or, but for detection, would have affected the equitable and consistent administration of the test or examination. This includes activities related to the preparation and certification of license applications and all activities related to the preparation, administration, and grading of the tests and examinations required by this part.

Contrary to the above, on June 24, 2025, during the initial license operator exam administration, Constellation personnel inadvertently and mistakenly engaged in an activity that compromised the integrity of the exam. Specifically, Constellation personnel failed to ensure all previous administered exam materials were cleaned up before the next crew was allowed to begin their exam. The exam material was discovered by the operating crew before beginning their exam. Therefore, this activity would have directly affected the equitable and consistent administration of the operating examination had it been administered. The crew was administered the spare scenario after Constellation's immediate corrective actions were completed.

Enforcement Action: This violation is being treated as an NCV, consistent with Section 2.3.2 of the Enforcement Policy.

4OA6 Meetings, Including Exit

The Chief Examiner presented the examination results to Pete Moodie, Site Vice President, and other members of the licensee's staff on July 31, 2025. The licensee acknowledged the observations presented.

The licensee did not identify any information or materials used during the examination as proprietary.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

Pete Moodie, Site Vice President
John Phillippi, Director Site Operations
Tom Dean, Director Training Oversight
Steven Minya, Training Oversight Manager
Ron McDowell, Training Oversight Manager
Larry Smith, Manager Site Regulatory Assurance
Alyssa Gambino, Manager Operations Training
Bryan Wooster, Operations Instructor-Lead
Jason Bone, Operations Instructor-Lead
Megan Parlett, Regulatory Exam Author
Kevin Swiger, Regulatory Exam Expert
Thomas Hayden, Operations Instructor
Travis Lefton, Principal Regulatory Engineer

ITEMS OPENED, CLOSED, AND DISCUSSED

Open/Closed

05000317(8)/2025301-01	NCV	Violation of NRC Examination Security as Required by 10 CFR 55.49 (Section 40A5.5)
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ADAMS DOCUMENTS REFERENCED

Accession No. ML25209A084 – Final Written Exam (Note: In accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for two years.)

Accession No. ML25198A248 – Final Operating Exam (Note: In accordance with current NRC policy, the release of this operating examination in ADAMS to the public will be delayed for two years.)