



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
2056 WESTINGS AVENUE, SUITE 400  
NAPERVILLE, IL 60563-2657

September 5, 2024

Q. Shane Lies  
Senior VP and Chief Nuclear Officer  
Indiana Michigan Power Company  
Nuclear Generation Group  
One Cook Place  
Bridgman, MI 49106

SUBJECT: DONALD C COOK NUCLEAR POWER PLANT, UNITS 1 AND 2 - NRC  
INITIAL LICENSE EXAMINATION REPORT 05000315/2024301 AND  
05000316/2024301

Dear Q. Shane Lies:

On August 2, 2024, the U.S. Nuclear Regulatory Commission (NRC) completed the initial operator licensing examination process for license applicants employed at your Donald C. Cook Nuclear Power Plant, Units 1 and 2. The enclosed report documents the results of those examinations. Preliminary observations and findings noted during the examination process were discussed on July 29, 2024, with Tod Kaspar, Operations Training Manager, and other members of your staff. An exit meeting was conducted by Microsoft Teams meeting on August 8, 2024, between Q. Shane Lies, Chief Nuclear Officer, and other members of your staff and Travis Iskierka-Boggs, Senior Operator Licensing Examiner, to review the proposed final grading of the written examination for the license applicants.

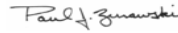
The NRC examiners administered an initial license examination operating test during the week of July 22, 2024. The written examination was administered by Donald C. Cook Nuclear Power Plant training department personnel on July 30, 2024. Nine Senior Reactor Operator and seven Reactor Operator applicants were administered license examinations. The results of the examinations were finalized on August 21, 2024. Fifteen applicants passed all sections of their respective examinations. One applicant was issued a Preliminary Results letter. Eight were issued senior operator licenses and seven were issued operator licenses.

The as-administered written examination and operating test, as well as documents related to the development and review (outlines, review comments and resolution, etc.) of the examination will be withheld from public disclosure until August 2, 2026. The enclosure contains details of this report.

However, since one applicant received a Preliminary Results letter because of receiving a less than passing grade on one portion of the operating test, the applicant was provided a copy of those portions of the operating test affected. For examination security purposes, your staff should consider those portions of the operating test uncontrolled and exposed to the public.

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 Title 10 of the *Code of Federal Regulations*, Part 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,



Signed by Zurawski, Paul  
on 09/05/24

Paul J. Zurawski, Chief  
Operations Branch  
Division of Operating Reactor Safety

Docket Nos. 50–315; 50–316  
License Nos. DPR–58; DPR–74

Enclosure:

1. Examination Report 05000315/2024301;  
and 05000316/2024301
2. Simulator Fidelity Report

cc: Distribution via LISTSERV®  
Daniel Emery, Training Manager

Letter to Q. Shane Lies from Paul J. Zurawski dated September 05, 2024.

SUBJECT: DONALD C COOK NUCLEAR POWER PLANT, UNITS 1 AND 2 - NRC  
INITIAL LICENSE EXAMINATION REPORT 05000315/2024301 AND  
05000316/2024301

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-315; 50-316

License Nos: DPR-58; DPR-74

Report Nos: 05000315/2024301; 05000316/2024301

Enterprise Identifier: L-2024-OLL-0009

Licensee: Indiana Michigan Power Company

Facility: Donald C. Cook Nuclear Power Plant, Units 1 and 2

Location: Bridgman, MI

Dates: July 22, 2024 to August 2, 2024

Examiners: T. Iskierka-Boggs, Senior Operations Engineer  
B. Bergeon, Senior Operations Engineer  
G. Roach, Senior Operations Engineer  
J. Nance, Operations Engineer  
R. Ng, Senior Project Engineer  
M. Kennard, Senior Operations Engineer, Region I  
J. Kirkland, Senior Operations Engineer, Region IV

Approved by: P. Zurawski, Chief  
Operations Branch  
Division of Operating Reactor Safety

## SUMMARY OF FINDINGS

ER 05000315/2024301; 05000316/2024301; 07/22/2024-08/02/2024; DONALD C COOK  
 NUCLEAR POWER PLANT, UNITS 1 AND 2. Initial License Examination Report.

The announced initial operator licensing examination was conducted by regional Nuclear Regulatory Commission (NRC) examiners in accordance with the guidance of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 12.

### Examination Summary:

Fifteen of sixteen applicants passed all sections of their respective examinations. Eight applicants were issued senior operator licenses, and seven applicants were issued operator licenses. One applicant was issued a Preliminary Results letter for failure of one section of the administered examination. (Section 40A5.1).

### A. NRC-Identified and Self-Revealing Findings

Failure to Maintain NRC Licensing Exam Security			
Cornerstone	Significance/Severity	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000315/2024301-01, 05000316/2024301-01	H.14 Conservative Bias	.5b Examination Security
<p>The inspectors reviewed a self-revealed Green finding and associated Severity Level IV non-cited violation (NCV) of Title 10 of the <i>Code of Federal Regulations</i> (10 CFR), Part 55.49, "Integrity of examinations and tests," in which the licensee failed to maintain examination security of the initial licensed operator operating test during preparations for administering the 2024 NRC examination. Specifically, on July 23, 2024, original copies of OHP-4023-FR-H.1, RESPONSE TO LOSS OF SECONDARY HEAT SINK, were being printed on printer MICNPTC15C, Serial Number 6TB453432, and was identified by an NRC examiner to be left unattended. The procedures were considered examination material that was to be utilized in both Unit 1 and Unit 2 simulators for the operating test scenario evaluations that day.</p>			

### B. Licensee-Identified and Self-Revealing Findings

None

## REPORT DETAILS

### 4OA5 Other Activities

#### .1 Initial Licensing Examinations

##### a. Examination Scope

The NRC examiners and members of the facility licensee's staff used the guidance prescribed in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 12, to develop, validate, administer, and grade the written examination and operating test. The written examination outlines were prepared by the NRC staff and were transmitted to the facility licensee's staff. Members of the facility licensee's staff developed the operating test outlines and developed the written examination and operating test. The NRC examiners validated the proposed examination during the week of June 17, 2024, with the assistance of members of the facility licensee's staff. During the on-site validation week, the examiners audited all license applications for accuracy. The NRC examiners, with the assistance of members of the facility licensee's staff, administered the operating test, consisting of job performance measures and dynamic simulator scenarios, during the period of July 22, 2024, through July 26, 2024. The facility licensee administered the written examination on July 30, 2024.

##### b. Findings

None.

#### (1) Written Examination

The NRC examiners determined that the written examination, as proposed by the licensee, was within the range of acceptability expected for a proposed examination. Less than 20 percent of the proposed examination questions were determined to be unsatisfactory and required modification or replacement.

During validation of the written examination, several questions were modified or replaced. All changes made to the proposed written examination, were made in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," and documented on Form 2.3-5, "Written Examination Review Worksheet." The Form 2.3-5, the written examination outlines, and both the proposed and final written examinations, will be available electronically in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS) on August 2, 2026 (ADAMS Accession Numbers ML22335A449, ML22335A448, ML22335A447, ML22335A452 respectively).

The NRC examiners graded the written examination on August 21, 2024, and conducted a review of each missed question to determine the accuracy and validity of the examination questions. Post-examination analysis revealed generic weaknesses in applicant performance with three Emergency and Abnormal Plant Evolutions, four Plant Systems, two Fundamentals, and one Senior Reactor Operator Generic Knowledge and Abilities questions with more than 50 percent of applicants answering incorrectly.

(2) Operating Test

The NRC examiners determined that the operating test, as originally proposed by the licensee, was within the range of acceptability expected for a proposed examination. Less than 20 percent of the proposed operating test portion of the examination was determined to be unsatisfactory and required modification or replacement.

During the validation of the operating test, several Job Performance Measures (JPMs) were modified or replaced, and some modifications were made to the dynamic simulator scenarios. Changes made to the operating test portion of the examination, were made in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," and documented on Form 2.3-3, "Operating Test Review Worksheet." The Form 2.3-3, the operating test outlines, and both the proposed and final as administered dynamic simulator scenarios and JPMs, will be available electronically in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS on August 2, 2026 (ADAMS Accession Numbers ML22335A449, ML22335A448, ML22335A447, ML22335A452 respectively).

The NRC examiners completed operating test grading on August 21, 2024. Post-examination analysis revealed generic weaknesses in applicant performance in the areas of Technical Specification recognition and application for inoperable equipment; senior reactor operator review, and approval of completed surveillance with lack of attention-to-details; and procedure use and adherence using two-column procedures.

(3) Examination Results

Nine applicants at the Senior Reactor Operator (SRO) level and seven applicants at the Reactor Operator (RO) level were administered written examinations and operating tests. Fifteen applicants passed all portions of their examinations and were issued their respective operating licenses on August 21, 2024. One applicant was issued a Preliminary Results letter for failure of the walkthrough (Systems and Administrative JPMs) section of the administered examination.

.2 Examination Security

a. Scope

The NRC examiners reviewed and observed the licensee's implementation of examination security requirements during the examination validation and administration to assure compliance with 10 CFR, Section 55.49, "Integrity of Examinations and Tests." The examiners used the guidelines provided in NUREG 1021, "Operator Licensing Examination Standards for Power Reactors," to determine acceptability of the licensee's examination security activities.

b. Findings

Failure to Maintain NRC Licensing Exam Security			
Cornerstone	Significance/Severity	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000315/2024301-01, 05000316/2024301-01	H.14 Conservative Bias	.5b Examination Security
<p>The inspectors reviewed a self-revealed Green finding and associated Severity Level IV non-cited violation (NCV) of Title 10 of the <i>Code of Federal Regulations</i> (10 CFR), Part 55.49, "Integrity of examinations and tests," in which the licensee failed to maintain examination security of the initial licensed operator operating test during preparations for administering the 2024 NRC examination. Specifically, on July 23, 2024, original copies of OHP-4023-FR-H.1, RESPONSE TO LOSS OF SECONDARY HEAT SINK, were being printed on printer MICNPTC15C, Serial Number 6TB453432, and was identified by an NRC examiner to be left unattended. The procedures were considered examination material that was to be utilized in both Unit 1 and Unit 2 simulators for the operating test scenario evaluations that day.</p>			
<p><u>Description:</u></p> <p>On the morning of July 23, 2024, a Donald C. Cook administrative assistant printed and duplicated copies of OHP-4023-FR-H.1, RESPONSE TO LOSS OF SECONDARY HEAT SINK, on printer MICNPTC15C, Serial Number 6TB453432, and the printer was identified to be unattended by an NRC examiner. The printer is in Room 1123, Consumable Storage, which is located across the hall from Room 1129, Operations Training Classroom, which is the room in which the initial license applicants were using as a waiting room prior to being sequestered for examination activities. Room 1123, Consumable Storage, has a refrigerator in which applicants were using to store their lunch items for the day.</p> <p>The examiner noted that the room was unattended, and the printer was printing examination material that was to be used on the operating test scenario that day. The examiner notified the chief examiner of the performance deficiency and the chief examiner reported to Room 1123 immediately. Upon arrival to Room 1123, the chief examiner noted the administrative assistant was leaving the room with a stack of procedures. The chief examiner asked the administrative assistant to have a discussion in which the chief examiner was able to affirm the procedures being printed were in fact to be used in the Unit 1 and Unit 2 simulators for the scenarios that day.</p> <p>A follow-up investigation included interviewing the initial license candidates that were present onsite at that time as the incident occurred prior to exam activities starting for the day. From the follow-up interviews, it was determined that five initial license candidates were onsite. One had entered Room 1123 while the administrative assistant was making copies, and no other applicants had entered the room during the duration of the printing process.</p> <p>The chief examiner walked down the training building and discussed the issue with the Operations Training Director and the administrative assistant. The examination compromise existed because personnel not signed onto the examination security agreement had access to the space with unguarded copies of the NRC operating test</p>			



procedures. Therefore, unauthorized personnel could have gained knowledge of initial license examination material prior to the administration of the examination.

Leaving the examination unguarded was a failure to ensure examination security requirements were met as required by 10 CFR 55.49 and site procedure TRP-2070-TAP-400-SEC, OPERATIONS TRAINING NRC EXAM SECURITY, Revision 016. Step 3.5.9 of TRP-2070-TAP-400-SEC states, in part, "Print computer generated material to the designated printer, located in the exam development room." Furthermore, TRP-2070-TAP-400-SEC, Step 3.5.1 states, "Maintain positive control of the examination at all times."

Corrective Actions: The facility licensee entered the issue into the corrective action program and performed an investigation to determine the extent of this issue. Operations Initial License Training department performed a standdown to review details of the near miss and coaching provided to involved individuals. Communications were sent to all training personnel for security learning. Based on the investigation and interviews conducted by the licensee, and the observations by the chief examiner, the NRC determined that there was no indication that the exam compromise would have an effect on the equitable administration of the exam. The examination was administered as scheduled with Operations Branch Chief concurrence.

Corrective Action Reference: AR 2024-5827

Performance Assessment:

Performance Deficiency: The failure to meet the examination security requirements of site procedure TRP-2070-TAP-400-SEC, "OPERATIONS TRAINING NRC EXAM SECURITY, Revision 016," steps 3.5.1 and 3.5.9 is a performance deficiency. The failure also constitutes a violation of 10 CFR 55.49, which was evaluated through the traditional enforcement process.

Screening: The inspectors determined the performance deficiency was more-than-minor, and therefore a finding; because if left uncorrected, the performance deficiency could have become more significant in that allowing licensed operators to perform duties in the control room without valid demonstration of appropriate knowledge of licensing examinations (i.e., the examination contents were known by the applicant prior to its administration) could be a precursor to a more significant event.

Significance: Using NRC Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 4, Tables 1, 2, and 3 (dated 12/13/19); and the corresponding Appendix I, "Licensed Operator Requalification Significance Determination Process," flowchart blocks 10 and 11 (dated 1/10/19), the finding was determined to have very low safety significance (Green). Although the performance deficiency resulted in a compromise of the integrity of the examination, the equitable and consistent administration of the examination was not actually affected by the compromise.

Cross-Cutting Aspect: H.14 Conservative Bias, "Individuals use decision-making practices that emphasize prudent choices over those that are simply allowable. A proposed action is determined to be safe in order to proceed, rather than unsafe in order to stop (DM.2)." Specifically, the administrative assistant could have printed the

copies in the NRC exam room but chose to go to a different room, since that is allowed, without analyzing potential negative outcomes and taking appropriate risk management actions.

Enforcement:

The ROP's significance determination process does not specifically consider the 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.

Violation: Title 10 CFR 55.49, "Integrity of examinations and test," states, in part, "Applicants, licensees, and facility licensees shall not engage in any activity that compromises the integrity of any application, tests, or examination required by this part. The integrity of any 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."

Contrary to the above, the licensee engaged in an activity that compromised the integrity of an application, test, or examination required by this part. Specifically, the licensee failed to ensure the requirements of 10 CFR Part 55.49, "Integrity of examinations and tests," were met for approximately five minutes subsequent to making copies during preparation for administering the 2024 NRC initial licensed operator operating test. If not for detection by an NRC examiner, this could have affected the equitable and consistent administration of the operating test. This is a violation of 10 CFR 55.49, "Integrity of examinations and tests."

Severity: The failure of the licensee to meet 10 CFR 55.49 requirements was determined to be a Severity Level IV (SL-IV) violation because it is consistent with section 6.4.d, "Violation Examples: Licensed Reactor Operators," of the Enforcement Policy. Section 6.4.d states, "Severity Level IV violations involve for example: a non-willful compromise...of an application, test, or examination required by 10 CFR Part 55." The performance deficiency would have impacted the regulatory process if licensing decisions were made with applicants who had prior knowledge of examination materials.

Enforcement Action: This violation is being treated as an NCV, consistent with Section 6.4, "Licensed Reactor Operators," of the NRC Enforcement Policy and is designated as Severity Level IV, NCV 050000315/2024301-01, 050000316/2024301-01.

## 4OA6 Meetings

### .1 Debrief

The chief examiner presented the examination team's preliminary observations and findings on July 29, 2024, to Tod Kaspar, Operations Training Manager, and other members of the Donald C. Cook Nuclear Power Plant Operations and Training Department staff.

### .2 Exit Meeting

The chief examiner conducted an exit meeting on August 8, 2024, with Q. Shane Lies, Chief Nuclear Officer, by Microsoft Teams. The NRC's final disposition of the station's grading of the written examination and post-examination comments were disclosed and discussed during the meeting. The chief examiner asked the licensee whether any of the retained submitted material used to develop or administer the examination should be considered proprietary. No proprietary or sensitive information was identified during the examination or debrief/exit meetings.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

K. Ferneau, Site Vice President  
L. Ellis, Plant Manager  
M. Scarpello, Regulatory Affairs Director  
K. Harper, Regulatory Affairs  
T. Kaspar, Operations Training Manager  
T. Valley, Operations Training  
T. Johansen, Operations Training

#### U.S. Nuclear Regulatory Commission

J. Mancuso, Senior Resident Inspector  
E. Kokkinis, Project Engineer  
P. Zurawski, Chief, Operations Branch  
T. Iskierka-Boggs, Chief Examiner  
G. Roach, Senior Operations Engineer  
B. Bergeon, Senior Operations Engineer  
J. Nance, Operations Engineer  
R. Ng, Senior Project Engineer  
M. Kennard, Senior Operations Engineer, Region II  
J. Kirkland, Senior Operations Engineer, Region IV

### **ITEMS OPENED, CLOSED, AND DISCUSSED**

#### Opened, Closed, and Discussed

None

### **LIST OF ACRONYMS USED**

ADAMS	Agencywide Document Access and Management System
NRC	U.S. Nuclear Regulatory Commission
RO	Reactor Operator
SRO	Senior Reactor Operator

## SIMULATION FACILITY FIDELITY REPORT

Facility Licensee: Donald C. Cook Nuclear Power Plant, Units 1 and 2

Facility Docket No: 50-315; 50-316

Operating Tests Administered: July 22, 2024 through July 26, 2024

The following documents observations made by the NRC examination team during the initial operator license examination. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of non-compliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information which may be used in future evaluations. No licensee action is required in response to these observations.

During the conduct of the simulator portion of the operating tests, the following items were observed:

ITEM	DESCRIPTION
AR 2024-5773	<p>Action Report generated detailing an issue that occurred during administration of a simulator scenario evaluation in which a vendor software issue was identified. Specifically, when a simulator initial condition is used which contains event triggers with expert mode commands, resetting the simulator to the saved initial condition may not properly load the saved event triggers, causing the scenario to not load as expected.</p> <p>Failure of the simulator to not load saved trigger events resulted in the applicant crew tripping the reactor due to conditions presented by the simulator software. The crew was unable to perform all pre-scripted events and the spare scenario was required to be administered to this crew.</p>
AR 2024-5914	<p>Action Report generated detailing a simulator hardware issue with the Unit 1 audio count rate drawer channel selector knob for selecting between N31 and N32 had a secondary scratch mark on the knob. The secondary mark looked very similar to the intended mark.</p> <p>This hardware issue caused confusion for one applicant during the performance of a simulator Job Performance Measure.</p>