



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

June 17, 2021

Mr. David Rhoades  
Senior VP, Exelon Generation Co., LLC  
President and CNO, Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: DRESDEN NUCLEAR POWER STATION—NRC INITIAL LICENSE  
EXAMINATION REPORT 05000237/2021301; 05000249/2021301

Dear Mr. Rhoades:

On May 14, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed the initial operator licensing examination process for license applicants employed your Dresden Nuclear Power Station. The enclosed report documents the results of those examinations. Preliminary observations noted during the examination process were discussed on April 23, 2021, with Mr. D. Thomas and other members of your staff. An exit meeting was conducted by telephone on May 20, 2021, between Mr. D. Thomas of your staff and Mr. C. Zoia, Senior Operator Licensing Examiner, to review the proposed final grading of the written examination for the license applicants. During the telephone conversation, NRC resolutions of the facility's post-examination comments, initially received by the NRC on May 14, 2021, were discussed.

The NRC examiners administered an initial license examination operating test during the week of April 19, 2021. The written examination was administered by Dresden Nuclear Power Station training department personnel on April 26, 2021. Four Senior Reactor Operator and three Reactor Operator applicants were administered license examinations. The results of the examinations were finalized on May 20, 2021. Seven applicants passed all sections of their respective examinations. Four were issued senior operator licenses and three were issued operator licenses.

The 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 May 14, 2023.

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,

Patricia J. Pelke, Chief  
Operations Branch  
Division of Reactor Safety

Docket Nos. 50-237; 50-249  
License Nos. DPR-19; DPR-25

Enclosures:

1. Examination Report 05000237/2021301;  
05000249/2021301
2. Simulator Facility Fidelity Report

cc: Distribution via LISTSERV®

Letter to David Rhoades from Patricia J. Pelke dated June 17, 2021.

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-237; 50-249

License No: DPR-19; DPR-25

Report No: 05000237/2021301; 05000249/2021301

Enterprise Identifier: L-2021-OLL-0022

Licensee: Exelon Generation Company, LLC

Facility: Dresden Nuclear Power Station, Units 2 and 3

Location: Morris, IL

Dates: April 19, 2021 through May 14, 2021

Examiners: C. Zoia, Senior Operations Engineer, Chief Examiner  
G. Roach, Senior Operations Engineer, Examiner  
R. Baker, Senior Operations Engineer, Examiner

Examination Authors: J. Robbins, Operations Engineer, Examiner in Training  
L. Rodriguez, Operations Engineer, Examiner in Training

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

## **SUMMARY OF FINDINGS**

ER 05000237/2021301; 05000249/2021301; 04/19/2021- 05/14/2021; Dresden Nuclear Power Station, Units 2 and 3; 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 11.

### Examination Summary:

Seven of seven applicants passed all sections of their respective examinations. Four applicants were issued senior operator licenses and three applicants were issued operator licenses. (Section 40A5.1).

## REPORT DETAILS

### 40A5 Other

#### .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 11, to develop, validate, administer, and grade the written examination and operating test. Members of the facility licensee's staff developed the written examination and NRC examiners prepared the operating test. The NRC examiners validated the proposed examination during the week of March 15, 2021, with the assistance of members of the facility licensee's staff. During the on-site validation week, the examiners audited more than 20 percent of the 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 April 19 through April 22, 2021. The facility licensee administered the written examination on April 26, 2021.

##### b. Findings

###### (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, requiring significant 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 ES-401-9, "Written Examination Review Worksheet." Form ES-401-9, 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 May 14, 2023 (ADAMS Accession Numbers ML20136A313, ML20136A310, ML20136A312, and ML20136A316, respectively).

On May 14, 2021, the licensee submitted documentation noting that there were no post-examination comments for consideration by the NRC examiners when grading the written examination.

The NRC examiners graded the written examination on May 11, 2021, and conducted a review of each missed question to determine the accuracy and validity of the examination questions.

(2) Operating Test

During the validation of the operating test, several Job Performance Measures 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 documented on Form ES-301-7, "Operating Test Comments." Form ES-301-7, the operating test outlines, and both the proposed and final as administered dynamic simulator scenarios and Job Performance Measures, will be available electronically in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS on May 14, 2023 (ADAMS Accession Numbers ML20136A313, ML20136A310, ML20136A312, and ML20136A316, respectively).

The NRC examiners completed operating test grading on May 20, 2021.

(3) Examination Results

Three applicants at the Senior Reactor Operator level and three applicants at the Reactor Operator level were administered written examinations and operating tests. In addition, one Senior Reactor Operator applicant was administered only a written exam. All seven applicants passed all portions of their examinations and were issued their respective operating licenses on May 20, 2021.

.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 Title 10 of the *Code of Federal Regulations*, Part 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

None.

## 4OA6 Meetings

### .1 Debrief

The chief examiner presented the examination team's preliminary observations and findings on April 23, 2021, to Mr. D. Thomas, Senior Manager of Training, and other members of the Dresden Nuclear Power Station Operations and Training Department staff.

### .2 Exit Meeting

The chief examiner conducted an exit meeting on May 20, 2021, with Mr. D. Thomas, Senior Manager of Training, by telephone. The NRC's final disposition of the station's grading of the written examination and post-examination comments were disclosed and discussed during the telephone discussion. The chief examiner asked the licensee whether any of the 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

D. Thomas, Senior Manager of Training  
J. Condreay, Operations Training Manager  
H. Patel, Shift Operations Superintendent  
F. Winter, Initial License Training Exam Author  
M. McCormick, Operations Facility Representative  
A. Kuzava, Senior Operations Training Instructor  
M. Shreve, Initial License Training Group Lead Instructor  
J. Van Fleet, Director of Organizational Performance and Regulatory  
D. Walker, Regulatory Affairs Specialist

#### U.S. Nuclear Regulatory Commission

C. Zoia, Senior Operations Engineer, Chief Examiner  
R. Baker, Senior Operations Engineer, Examiner  
G. Roach, Senior Operations Engineer, Examiner  
J. Robbins, Operations Engineer, Examiner in Training  
L. Rodriguez, Operations Engineer, Examiner in Training  
A. Nguyen, Dresden Senior Resident Inspector

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

#### Opened, Closed, and Discussed

None

### **LIST OF ACRONYMS USED**

ADAMS	Agency-Wide Document Access and Management System
NRC	U.S. Nuclear Regulatory Commission

## SIMULATION FACILITY FIDELITY REPORT

Facility Licensee: Dresden Nuclear Power Station, Units 2 and 3

Facility Docket No: 50-237; 50-249

Operating Tests Administered: April 19, 2021 through April 22, 2021

The following documents observations made by the U.S. Nuclear Regulatory Commission 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 Title 10 of the *Code of Federal Regulations*, Part 55.45(b). These observations do not affect U.S. Nuclear Regulatory Commission 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
SWR 0136983	Simulator Out of Bounds during a scenario
SWR 0136981	Clean Demineralizer Header Pressure Erratic/Reading Incorrectly
AR 04418521	CAEP Issue – 2 Valves closed automatically during a JPM