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

August 23, 2021

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

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2—NRC INITIAL LICENSE EXAMINATION REPORT 05000254/2021301; 05000265/2021301

Dear Mr. Rhoades:

On June 30, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed the initial operator licensing examination process for license applicants employed at your Quad Cities Nuclear Power Station. The enclosed report documents the results of those examinations. Preliminary observations noted during the examination process were discussed on June 10, 2021, with Mr. B. Wake, Site Plant Manager, and other members of your staff. An exit meeting was conducted by telephone on July 9, 2021, with Mr. K. Ohr, Site Vice President, other members of your staff, and Mr. R. Baker, Chief Operator Licensing Examiner, to review the final grading of the written examination for the license applicants. The NRC also confirmed that the station submitted documentation noting that there were no post-examination comments for consideration during NRC grading of the examination.

The NRC examiners administered an initial license examination operating test during the weeks of May 31 and June 7, 2021. The written examination was administered by Quad Cities Nuclear Power Station training department personnel on June 14, 2021. Seven Senior Reactor Operator and six Reactor Operator applicants were administered license examinations. The results of the examinations were finalized on July 28, 2021. Thirteen applicants passed all sections of their respective examinations. Seven applicants were issued senior operator licenses and six applicants 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 June 30, 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,

Signed by Pelke, Patricia
on 08/23/21

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

Docket Nos. 50–254; 50–265
License Nos. DPR–29; DPR–30

Enclosure:
1. Examination Report 05000254/2021301;
   05000265/2021301
2. Simulator Facility Fidelity Report

cc: Distribution via LISTSERV®
   S. Mongreig – Senior Manager Site Training, Quad Cities

Letter to David Rhoades from Patricia J. Pelke dated August 23, 2021.

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2—NRC INITIAL LICENSE EXAMINATION REPORT 05000254/2021301; 05000265/2021301

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50–254; 50–265
License No:	DPR–29; DPR–30
Report No:	05000254/2021301; 05000265/2021301
Enterprise Identifier:	L-2021-OLL-0024
Licensee:	Exelon Generation Company, LLC
Facility:	Quad Cities Nuclear Power Station, Units 1 and 2
Location:	Cordova, IL
Dates:	May 31, 2021, through June 30, 2021
Examiners:	R. Baker, Senior Operations Engineer, Chief Examiner B. Bartlett, Senior Operations Engineer, Examiner J. Kirkland, Senior Operations Engineer, Examiner J. Nance, Operations Engineer, Examiner
Approved by:	P. Pelke, Chief Operations Branch Division of Reactor Safety

SUMMARY

ER 05000254/2021301; 05000265/2021301; 05/31/2021–06/30/2021; Exelon Generation Company, LLC; Quad Cities Nuclear Power Station; Units 1 and 2; Initial License Examination Report.

The announced initial operator licensing examination was conducted by regional Nuclear Regulatory Commission examiners in accordance with the guidance of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 11.

Examination Summary

Thirteen of thirteen applicants passed all sections of their respective examinations. Seven applicants were issued senior operator licenses and six applicants were issued operator licenses. (Section 4OA5.1)

REPORT DETAILS

4OA5 Other Activities

.1 Initial Licensing Examinations

a. Examination Scope

The U.S. Nuclear Regulatory Commission (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. 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 May 10, 2021, with the assistance of members of the facility licensee's staff. During the onsite validation week, the examiners audited four 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 May 31, 2021, through June 9, 2021. The facility licensee administered the written examination on June 14, 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 and required modification or replacement.

During the validation of the written examination, several questions were modified or replaced. All changes made to the written examination were made in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," and were documented on Form ES-401-9, "Written Examination Review Worksheet." The 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 June 30, 2023, (ADAMS Accession Numbers ML20139A015, ML20139A013, ML20139A014, and ML20139A019, respectively).

On June 30, 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 July 6, 2021, and conducted a review of each missed question to determine the accuracy and validity of the examination questions.

(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.

Following the review and validation of the operating test, several job performance measures were modified or replaced, and some modifications were made to the dynamic simulator scenarios. All changes made to the operating test were made in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," and were documented on Form ES-301-7, "Operating Test Review Worksheet." The Form ES-301-7, the operating test outlines, and both the proposed and final operating tests, will be available electronically in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS on June 30, 2023, (ADAMS Accession Numbers ML20139A015, ML20139A013, ML20139A014, and ML20139A019, respectively).

The NRC examiners completed operating test grading on July 28, 2021.

(3) Examination Results

Seven applicants at the Senior Reactor Operator level and six applicants at the Reactor Operator level were administered written examinations and operating tests. Thirteen applicants passed all portions of their examinations and were issued their respective operating licenses on July 28, 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 Title10 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 Management Meetings

.1 Debrief

The chief examiner presented the examination team's preliminary observations and findings on June 10, 2021, to Mr. B. Wake, Site Plant Manager, and other members of the Quad Cities Nuclear Power Station Operations and Training Department staff.

.2 Exit Meeting

The chief examiner conducted an exit meeting on July 9, 2021, with Mr. K. Ohr, Site Vice President, and other members of the Quad Cities Nuclear Power Station staff, by telephone. The NRC's final disposition of the station's grading of the written examination was discussed during the telephone discussion. 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

S. Mongreig, Senior Manager Site Training
B. Nichols, Operations Training Manager
R. Luebbe, Regulatory Assurance Manager, Acting
D. Haberkorn, Operations Department
A. Ali, Operations Department
T. Resig, Operations Training
A. Overbo, Initial License Training, Examination Author

U.S. Nuclear Regulatory Commission

R. Baker, Senior Operations Engineer, Chief Examiner
B. Bartlett, Senior Operations Engineer, Examiner
J. Kirkland, Senior Operations Engineer, Examiner
J. Nance, Operations Engineer, Examiner
C. Hunt, Quad Cities Senior Resident Inspector

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

SIMULATOR FIDELITY REPORT

Facility Licensee: Quad Cities Nuclear Power Station

Facility Docket No: 50–254; 50–265

Operating Tests Administered: May 31, 2021, through June 9, 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
None.	