

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, IL 60532-4352

January 19, 2010

Mr. Charles G. Pardee Senior Vice President, Exelon Generation Company, LLC President and Chief Nuclear Officer (CNO), Exelon Nuclear 4300 Winfield Road Warrenville IL 60555

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

NRC INITIAL LICENSE EXAMINATION REPORT 05000254/2009301(DRS); 05000265/2009301(DRS)

Dear Mr. Pardee:

On December 18, 2009, the U. S. Nuclear Regulatory Commission (NRC) examiners completed initial operator licensing examinations at your Quad Cities Nuclear Power Station. The enclosed report documents the results of the examination which were discussed at the exit meeting on December 11, 2009, with Mr. Karl Moser and other members of your staff.

The NRC examiners administered an initial license examination operating test during the weeks of November 30 and December 7, 2009. The written examination was administered by Quad Cities Nuclear Power Plant training department personnel on December 14, 2009. Eight Senior Reactor Operators and three Reactor Operator applicants were administered license examinations. The results of the examinations were finalized on January 11, 2010. All applicants passed all sections of their respective examinations and eight were issued senior operator licenses and three were issued operator licenses.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

C. Pardee -2-

We will gladly discuss any questions you have concerning this examination.

Sincerely,

/RA by Michael E. Bielby for/

Hironori Peterson, Chief Operations Branch Division of Reactor Safety

Docket Nos. 50-254, 50-265 License Nos. DPR-29, DPR-30

Enclosures: 1. Operator Licensing Examination

Report 05000254/2009301(DRS); 05000265/2009301(DRS)

w/Attachment: Supplemental Information

2. Simulation Facility Report

3. Written Examinations and Answer Keys (SRO)

cc w/encls: Distribution via ListServ

U. S. NUCLEAR REGULATORY COMMISSION REGION III

Docket No: 50-254; 50-265

License No: DPR-29, DPR-30

Report No: 05000254/2009301(DRS);

05000265/2009301(DRS)

Licensee: Exelon Generation Company, LLC

Facility: Quad Cities Nuclear Power Station, Units 1 and 2

Location: Cordova, Illinois

Dates: November 30 – December 14, 2009

Examiners: R. Walton, Operations Engineer (Chief)

D. McNeil, Senior Operations Engineer

C. Zoia, Operations Engineer

Approved by: Hironori Peterson, Chief

Operations Branch

Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000254/2009301(DRS); 05000265/2009301(DRS); 11/30/2009 - 12/14/2009; Exelon Generating Company, LLC, Quad Cities Station 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 9.

Examination Summary:

• Eleven of eleven applicants passed all sections of their respective examinations. Eight applicants were issued senior operator licenses and three applicants were issued operator licenses. (Section 4OA5.1).

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA5 Other

.1 Initial Licensing Examinations

a. Examination Scope

The licensee prepared the examination outline and developed the written examination and operating test. The NRC examiners validated the proposed examination during the week of November 2, 2009, at the Quad Cities Nuclear Power Station Training Building with the assistance of members of the licensee training staff. During the on-site validation week, the examiners audited three license applications for accuracy. The NRC examiners conducted the operating portion of the initial license examination during the weeks of November 30 and December 7, 2009. Members of the Quad Cities Nuclear Power Station training department staff administered the written examination on December 14, 2009. The NRC examiners used the guidance established in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, to prepare, validate, revise, administer, and grade the examination.

b. Findings

Written Examination

The NRC examiners determined that the written examination, as originally submitted by the licensee, was within the range of acceptability expected for a proposed examination. During the validation of the written examination several questions were modified or replaced. Changes made to the written examination were documented on Form ES-401-9, "Written Examination Review Worksheet" which is available electronically in the NRC Public Document Room or from the Publicly Available Records component of NRC's document system (ADAMS). The licensee did not submit any post-exam comments. The NRC examiners graded the written examination on December 30, 2009, and conducted a review of each missed question to determine the accuracy and validity of the examination questions.

Operating Test

The NRC examiners determined that the operating test, as originally submitted by the licensee, was within the range of acceptability expected for a proposed examination. During the validation of the operating test, minor comments were added to several Job Performance Measures (JPMs) and minor changes were made to the dynamic simulator scenarios. Changes made to the operating test were documented in a document titled, "Operating Test Comments," which is available electronically in the NRC Public Document Room or from the Publicly Available Records component of NRC's document system (ADAMS). The NRC examiners completed operating test grading on January 6, 2010.

Examination Results

Eight applicants at the Senior Reactor Operator (SRO) level and three applicants at the Reactor Operator (RO) level were administered written and operating tests. All 11 applicants passed all portions of the operating and written exam.

.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 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

No Findings

4OA6 Meetings

Exit Meeting

The chief examiner conducted an exit meeting regarding the examination team's preliminary observations and findings on December 11, 2009, to K. Moser, and other members of the Perry Operations and Training Department staff. The examiners 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 exit meeting.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

K. Moser, Training Director

D. Kimler, Shift Operations Supervisor Dan Snook, Operations Training Manager

J. Cox, Facility Representative

R. Venci, Lead Exam Author

D. Haas, Initial License Training, Lead Instructor

J. Bries, Initial License Training Instructor

M. Wagner, Regulatory Assurance

NRC

R. Walton, Chief Examiner

J. McGhee, Senior Resident Inspector, Quad Cities Station

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, and Discussed

None

LIST OF DOCUMENTS REVIEWED

None

LIST OF ACRONYMS USED

ADS Automatic Depressurization System

ADAMS Agency-Wide Document Access and Management System

BWR Boiling Water Reactor
DRS Division of Reactor Safety
IR Inspection Report

in inspection report

JPM Job Performance Measures

NRC U. S. Nuclear Regulatory Commission

RO Reactor Operator

SRO Senior Reactor Operator

SIMULATION FACILITY REPORT

Facility Licensee: Quad Cities Nuclear Power Station

Facility Docket No: 50-254; 50-265

Operating Tests Administered: 11/30 – 12/7/2009

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
1	Four individual instrument displays on the control room front panels stopped working after Crew 2 took the shift for performance of Scenario 1. Crew 2 was told that the computer server that supplied instrument data to the displays had stopped working. The crew was informed of the component failure and was told to continue with the scenario. The crew used panel displays in lieu of the instrument display. The inspectors did not believe this component failure had any affect on the crew operation of the simulator. The licensee replaced the faulted server that evening.
2	While performing Scenario 3, torus pressure reached 60 psig and caused the simulator computer to lock up. This condition was noted during onsite validation and the examiners planned to have the operators 'walk through' their actions and examiners ask questions, if necessary. However, all crews completed the scenario in a timely manner and performed the required actions at the time the simulator locked up. The applicants actions were sufficiently complete to allow the examiners to evaluate crew performance without the examinees needing to 'walk through' their actions.
3	CRD Drift indicator for rod L-7 did not light when required during the first performance of Scenario 4. After the scenario was completed, the licensee reported that the entire L-7 socket was bad and needed to be replaced. In lieu of replacing the socket, the licensee chose another CRD to drift for subsequent scenarios. The licensee documented this condition on a simulator work request.

Post Examination Comments and Resolutions

WRITTEN EXAMINATIONS AND ANSWER KEYS (RO/SRO)

RO/SRO Initial Examination and Answer Keys ADAMS Accession # ML100140586

C. Pardee -2-

We will gladly discuss any questions you have concerning this examination.

Sincerely,

/RA by Michael E. Bielby for/

Hironori Peterson, Chief **Operations Branch** Division of Reactor Safety

Docket Nos. 50-254, 50-265 License Nos. DPR-29, DPR-30

Enclosures: 1. **Operator Licensing Examination**

Report 05000254/2009301(DRS); 05000265/2009301(DRS)

w/Attachment: Supplemental Information

2. Simulation Facility Report

3. Written Examinations and Answer Keys (SRO)

cc w/encls: Distribution via ListServ

DISTRIBUTION:

Susan Bagley

RidsNrrDorlLpl3-2 Resource

RidsNrrPMQuad Cities

RidsNrrDirsIrib Resource

Cynthia Pederson

Steven Orth

Jared Heck

Allan Barker

Carole Ariano

Linda Linn

DRPIII

DRSIII

Patricia Buckley

Tammy Tomczak

ROPreports Resource

John McHale

DOCUMENT NAME:	R:\INSPRPTS\POW	ERS\QUA\QUA 2010\QUA	2009 301 DRS OL.doo
□ Publicly Available	□ Non-Publicly Available	□ Sensitive	□ Non-Sensitive

☐ Publicly Available ☐ Non-Publicly Available □ Sensitive To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

OFFICE	RIII		RIII			
NAME	KWalton:co		HPeterson MEB for			
DATE	01/19/2010		01/19/2010			