



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I**
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

May 22, 2014

Mr. Michael J. Pacilio
Senior Vice President, Exelon Generation Company, LLC
President and Chief Nuclear Officer, Exelon Nuclear
4300 Winfield Rd.
Warrenville, IL 60555

SUBJECT: THREE MILE ISLAND NUCLEAR STATION, UNIT 1 - NRC INITIAL
OPERATOR LICENSING EXAMINATION REPORT 05000289/2014301

Dear Mr. Pacilio:

On April 15, 2014, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Three Mile Island Nuclear Station, Unit 1. The enclosed report documents the examination findings, which were discussed on May 13, 2014, with Mr. Chet Incorvati, Training Director, and other members of your staff.

The examination included the evaluation of two applicants for reactor operator licenses and six applicants for instant senior operator licenses. The written and operating examinations were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. The license examiners determined that all eight of the eight applicants satisfied the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 55, and the appropriate licenses were issued on May 13, 2014.

No findings were identified during this examination.

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

Sincerely,

/RA/

Donald E. Jackson, Chief
Operations Branch
Division of Reactor Safety

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Division of Reactor Safety

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DATE	5/21/14	5/22/14			

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M. Pacilio

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Docket No.: 05000289

License No.: DPR-50

Enclosure:

NRC Initial Operator Licensing Examination

Report 05000289/2014301

w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

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EXAMINATION REPORT

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

Docket: 50-289

License: DPR-50

Report : 05000289/2014301

Licensee: Exelon Nuclear

Facility: Three Mile Island Nuclear Station, Unit 1

Location: Middletown, PA 17057

Dates: April 7-11, 2014 (Operating Test Administration)
April 15, 2014 (Written Examination Administration)
April 21, 2014 (Licensee Submitted Post Exam Package)
April 21-May 12, 2014 (NRC Examination Grading)
May 13, 2014 (Licenses Issued)

Examiners: P. Presby, Chief Examiner, Operations Branch
J. D'Antonio, Senior Operations Engineer
B. Fuller, Senior Operations Engineer
C. Lally, Operations Engineer

Approved By: Donald E. Jackson, Chief
Operations Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000289/2014301; April 07-15, 2014; Three Mile Island Nuclear Station, Unit 1; Initial Operator Licensing Examination Report.

NRC examiners evaluated the competency of two applicants for reactor operator licenses and six applicants for instant senior operator licenses at Three Mile Island Nuclear Station, Unit 1. The facility licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. The written examination was administered by the facility on April 15, 2014. NRC examiners administered the operating tests on April 07-11, 2014. The license examiners determined that all eight of the eight applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

No findings were identified.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA5 Other Activities (Initial Operator License Examination)

.1 License Applications

a. Scope

The examiners reviewed all eight 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 three 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 April 15, 2014, the licensee proctored the administration of the written examinations to all eight applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on April 21, 2014.

The NRC examination team administered the various portions of the operating examination to all eight applicants on April 07-11, 2014. The two applicants for reactor operator licenses participated in at least two dynamic simulator scenarios, in a control room and facilities walkthrough test consisting of 11 system tasks, and an administrative test consisting of four administrative tasks. The six applicants seeking an instant senior operator license participated in at least two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 10 system tasks, and an administrative test consisting of five administrative tasks.

b. Findings

All eight of the applicants passed the written exam and all parts of the operating test. For the written examinations, the reactor operator applicants' average score was 87.33 percent and ranged from 85.33 to 89.33 percent, the senior operator applicants' average score was 85.66 percent and ranged from 81.00 to 92.00 percent. The overall written examination average was 86.08 percent.

Enclosure

The NRC examiners completed the final grading of the written examination on April 21, 2014, and conducted a review of each missed question to determine the accuracy and validity of the examination questions. Chapter ES-403 and Form ES-403-1 of NUREG 1021 require the licensee to analyze the validity of any written examination questions that were missed by half or more of the applicants. The licensee conducted this performance analysis for 12 questions that met these criteria and determined that all of the analyzed questions were technically accurate. No written exam post-exam comments were submitted. In accordance with current NRC policy, the release of this written examination will be delayed for 2 years. The text of the examination questions may be accessed in the ADAMS system under the accession number noted in Attachment 1.

.3 Initial Licensing Examination Development

a. Examination Scope

The facility licensee developed the examinations in accordance with NUREG-1021, Revision 9, Supplement 1. All licensee facility training and operations staff involved in examination preparation and validation were listed on a security agreement. The facility licensee submitted both the written and operating examination outlines on January 07, 2014. The chief examiner reviewed the outlines against the requirements of NUREG-1021, and provided comments to the licensee. The facility licensee submitted the draft examination package on February 06, 2014. The chief examiner reviewed the draft examination package against the requirements of NUREG-1021, and provided comments to the licensee on the examination on February 21, 2014. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of March 10, 2014. The licensee satisfactorily completed comment resolution on April 01, 2014.

b. Findings

The NRC approved the initial examination outline and advised the licensee to proceed with the operating examination development.

The examiners determined that the written and operating examinations initially submitted by the licensee 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.

Enclosure

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 requirements. Plans for simulator security and applicant control were reviewed and discussed with licensee personnel.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

The chief examiner presented the examination results to Mr. Chet Incorvati, Training Director, and other members of the licensee's management staff on May 13, 2014.

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

Attachment:
Supplemental Information

Enclosure

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

C. Incorvati, Training Director
J. Blair, Operations Training Manager
J. Tesmer, Simulator Support-Section Leader
T. Megill, Nuclear Training Instructor, Exam Developer
J. Ward, Nuclear Training Instructor, Exam Developer
N. Favorito, SRO Facility Representative
S. Sallade, Licensed Operator Initial Training Lead

NRC Personnel

D. Jackson, Operations Branch Chief
P. Presby, Chief Examiner

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Opened and Closed

NONE

Closed

NONE

Discussed

NONE

ADAMS DOCUMENTS REFERENCED

Accession No. ML14141A105 – 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. ML14141A107– FINAL-Operating Exam