



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

May 15, 2017

Mr. John Dent, Jr.
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5508

SUBJECT: PILGRIM NUCLEAR POWER STATION – INITIAL OPERATOR LICENSING
EXAMINATION REPORT 05000293/2017301

Dear Mr. Dent:

On March 2, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at the Pilgrim Nuclear Power Station. The enclosed examination report documents the examination results, which were discussed on April 12, 2017, with Mr. Doug LeCuyer of your training staff.

The examination included the evaluation of one applicant for a reactor operator license and seven applicants for instant senior reactor operator licenses. The written and operating examinations were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 10. The license examiners determined that all applicants satisfied the requirements of Title 10 of the *Code of Federal Regulation (10 CFR)*, Part 55, and the appropriate licenses were issued on April 12, 2017.

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 Agencywide Documents Access Management System (ADAMS). ADAMS is accessible from the NRC website <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

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

Docket No. 50-293
License No. DPR-35

Enclosure:
Examination Report 05000293/2017301
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

SUBJECT: PILGRIM NUCLEAR POWER STATION – INITIAL OPERATOR LICENSING
EXAMINATION REPORT 05000293/2017301 DATED MAY 15, 2017

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

Docket: 50-293
License: DPR-35
Report: 05000293/2017301
Licensee: Entergy Nuclear Operations, Inc.
Facility: Pilgrim Nuclear Power Station
Location: Plymouth, MA 02360-5508
Dates: February 27 - March 2, 2017 (Operating Test Administration)
February 17, 2017 (Written Examination Administration)
March 10, 2017 (Licensee Submitted Post Exam Package)
April 12, 2017 (NRC Examination Grading)
April 12, 2017 (Licenses Issued)

Examiners: J. M. D'Antonio, Chief Examiner, Senior Operations Engineer
P. Presby, Senior Operations Engineer
P. Ott, Operations Engineer

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

Enclosure

SUMMARY

ER 05000293/2017301; 2/27/17 - 3/2/17; Pilgrim Nuclear Power Station; Initial Operator Licensing Examination Report

Three NRC examiners evaluated the competency of one applicant for a reactor operator license and seven applicants for instant senior reactor operator licenses at the Pilgrim Nuclear Power Station. The facility licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 10. The written examination was administered by the facility on February 17, 2017. NRC examiner(s) administered the operating tests on February 27 - March 2, 2017. The NRC examiners determined that all applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA5 Other Activities (Initial Operator License Examination).1 License Applicationsa. 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 two 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 Performancea. Examination Scope

On February 17, 2017, 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.

The NRC examination team administered the various portions of the operating examination to all eight applicants on February 27 - March 2, 2017. The one applicant for a reactor operator license participated in three dynamic simulator scenarios, in a control room and facilities walkthrough test consisting of eleven system tasks, and an administrative test consisting of four administrative tasks. The seven applicants seeking an instant senior reactor operator license participated in two or three dynamic simulator scenarios, a control room and facilities walkthrough test consisting of ten system tasks, and an administrative test consisting of five administrative tasks.

b. Findings

All applicants passed all parts of the operating test. All applicants passed the written examination. For the written examinations, the one reactor operator applicant's score was 89.33 percent. The senior operator applicants' average score was 91.14 percent and ranged from 88 to 94 percent. The overall written examination average was 90.91 percent. The text of the examination questions, the licensee's examination analysis, and the licensee's post-examination comments may be accessed in the ADAMS system

under the accession numbers noted in Attachment 1. In accordance with current NRC policy, the release of this examination in ADAMS to the public will be delayed for two years.

The NRC examiners completed the final grading of the written examination on April 12, 2017, and conducted a review of each missed question to determine the accuracy and validity of the examination questions. In accordance with current NRC policy, the release of this written examination will be delayed for two years.

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 all questions that met these criteria and submitted the analysis to the chief examiner. No exam changes were recommended.

.3 Initial Licensing Examination Development

a. Examination Scope

The facility licensee developed the examinations in accordance with NUREG-1021, Revision 10. 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 November 15, 2016. 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 December 30, 2016. The chief examiner reviewed the draft examination package against the requirements of NUREG-1021, and provided comments to the licensee on the examination. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of January 30, 2017. The licensee satisfactorily completed comment resolution during the validation week.

b. Findings

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

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, Revision 10 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. Doug LeCuyer, Exam Developer, on April 12, 2017. The licensee acknowledged the results and comments presented.

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

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Taylor, Superintendent of Operations Training
C. Renaud, Training Coordinator
D. LeCuyer, Exam developer
R. Haislet, Shift Manager - Training

NRC Personnel

E. Carfang, Senior Resident Inspector
J. D'Antonio, Chief Examiner

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Opened and Closed

NONE

Closed

NONE

Discussed

NONE

ADAMS DOCUMENTS REFERENCED

Accession No. ML17118A308 – 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. ML17118A309 – FINAL-Operating Exam