



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

December 2, 2011

Thomas P. Joyce
President and Chief Nuclear Officer
PSEG Nuclear LLC-N09
P. O. Box 236
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNITS 1 AND 2-NRC INITIAL
OPERATOR LICENSING EXAMINATION REPORT 05000272/2011301;
05000311/2011301

Dear Mr. Joyce:

On September 26, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Salem Nuclear Generating Station, Units 1 and 2. The enclosed report documents the examination findings, which were discussed on November 10, 2011, with Mr. M. Kafantaris of your staff.

The examination included the evaluation of one applicant for reactor operator license, six applicants for instant senior operator licenses, and one applicant for upgrade senior operator license. 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 four of the eight applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses were issued on November 10, 2011.

No findings were identified during this examination.

Three applicants for instant senior reactor operator licenses failed the written portion of their exams and were denied licenses. One applicant for an instant senior reactor operator license passed the exam, but his license is being held based on his written exam grades. Licenses for applicants with written exam passing grades of 82 percent or below are normally held for review until those applicants who failed the examination have had an opportunity to appeal their license denials.

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 Document Access and Management System (ADAMS). ADAMS is accessible from

T. Joyce

2

the NRC Web site at <http://www.nrc.gov/reading-rm/adams/web-based.html> (the Public Electronic Reading Room).

Sincerely,

A handwritten signature in black ink, appearing to read 'Donald E. Jackson', with a stylized flourish at the end.

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

Docket Nos. 50-272; 50-311
License Nos. DPR-70; DPR-75

Enclosure:
NRC Initial Operator Licensing Examination
Report 05000272/2011301 and 05000311/2011301
w/Attachment: Supplemental Information

cc w/enclosure: Distribution via ListServ

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

Docket Nos. 50-272; 50-311
License Nos. DPR-70; DPR-75

Enclosure:
NRC Initial Operator Licensing Examination
Report 05000272/2011301 and 05000311/2011301
w/Attachment: Supplemental Information

cc w/enclosure: Distribution via ListServ

DISTRIBUTION w/encl:

- W. Dean, RA (R1ORAMAIL Resource)
- D. Lew, DRA (R1ORAMAIL Resource)
- D. Roberts, DRP (R1DRPMAIL Resource)
- D. Ayres, DRP (R1DRPMAIL Resource)
- C. Miller, DRS (R1DRSMail Resource)
- P. Wilson, DRS (R1DRSMail Resource)
- A. Burritt, DRP
- L. Cline, DRP
- A. Turilin, DRP
- R. Montgomery, DRP
- D. Schroeder, DRP, SRI
- P. McKenna, DRP, RI
- K. McKenzie, DRP, OA
- M. Franke, RI OEDO
- RidsNrrPMSalem Resource
- RidsNrrDorlLpl1-2 Resource
- ROPreports Resource

SUNSI Review Complete: DS (Reviewer's Initials)

ADAMS PKG: ML110030673

ADAMS NO.: ML113360214

DOCUMENT NAME: G:\DRS\Operations Branch\PRESBY\Exam FY11-Salem Sep 11(U01830)\SALEM EXAM REPORT.docx
After declaring this document "An Official Agency Record" it will be released to the Public.

OFFICE	RI/DRS/OB	RI/DRS/OB			
NAME	PPresby/DS	DEJackson/CGM			
DATE	12/1/11	12/2/11			

OFFICIAL RECORD COPY

EXAMINATION REPORT

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

Docket Nos.: 50-272; 50-311

License Nos.: DPR-70; DPR-75

Report Nos.: 05000272/2011301; 05000311/2011301

Licensee: PSEG Nuclear LLC

Facility: Salem Nuclear Generating Station, Units 1 and 2

Location: P. O. Box 236
Hancocks Bridge, NJ 08038

Dates: September 19 - 22, 2011 (Operating Test Administration)
September 26, 2011 (Written Examination Administration)
October 21, 2011 (Licensee Submitted Post Exam Package)
September 23 – November 9, 2011 (NRC Examination Grading)
November 10, 2011 (Licenses Issued)

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

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

SUMMARY OF FINDINGS

ER 05000272/2011301; 05000311/2011301; September 19 - 26, 2011; Salem Nuclear Generating Station, Units 1 and 2; Initial Operator Licensing Examination Report.

NRC examiners evaluated the competency of one applicant for reactor operator license, six applicants for instant senior operator licenses, and one applicant for upgrade senior operator license at Salem Nuclear Generating Station, Units 1 and 2. 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 September 26, 2011. NRC examiners administered the operating tests on September 19 - 22, 2011. The license examiners determined that four of the eight applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

A. NRC-Identified and Self-Revealing Findings

No findings were identified.

B. Licensee-Identified Violations

None.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA5 Other Activities Initial or 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 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 Performance

a. Examination Scope

On September 26, 2011, the facility 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 October 21, 2011.

The NRC examination team administered the various portions of the operating examination to all eight applicants on September 19 - 22, 2011. The one applicant for reactor operator license participated in three 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. Five applicants seeking an instant senior operator license participated in three dynamic simulator scenarios. The sixth applicant seeking an instant senior operator license participated in two dynamic simulator scenarios. All of the applicants seeking instant senior operator licenses participated in a control room and facilities walkthrough test consisting of ten system tasks, and an administrative test consisting of five administrative tasks. The one applicant for upgrade senior operator license participated in two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of five system tasks, and an administrative test consisting of five administrative tasks.

Enclosure

b. Findings

All eight of the applicants passed all parts of the operating test. Three instant senior reactor operator applicants failed the written examination. For the written examinations, the reactor operator applicant's score was 91.89 percent, the senior operator applicants' average score was 82.22 percent, and the individual scores ranged from 79.59 to 86.73 percent. The overall written examination average was 83.43 percent.

The NRC examiners completed the final grading of the written examination on November 9, 2011, 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 and submitted it to the chief examiner. Twelve questions were missed by at least half of the applicants. The licensee determined that their training material content pertaining to these questions was acceptable.

The licensee submitted three post-examination questions comments on October 21, 2011. The NRC reviewed the facility's post-exam comment submittal package and accepted facility recommendations on two of the three questions. Question #49 on the reactor operator exam and Question #14 on the senior reactor operator exam were deleted from the exams, as requested by the facility. The NRC did not accept Choice "A" as a second correct answer for the senior reactor operator Question #4, which was requested by the facility. The text of the examination questions and the licensee's post-examination comments with the NRC resolutions may be accessed in the Agencywide Documents Access and Management System (ADAMS) under the accession numbers noted in the 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 June 30, 2011. 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 August 3, 2011. The chief examiner reviewed the draft examination package against the requirements of NUREG-1021, and provided comments to the licensee on the examination on August 15, 2011. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of August 15, 2011. The licensee satisfactorily completed comment resolution for the operating test on September 10, 2011, and for the written exam on September 21, 2011.

Enclosure

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.

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. M. Kafantaris, Training Manager, on November 10, 2011. The licensee acknowledged the findings presented.

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

Enclosure

A-1

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Carney, Operations Training Manager
G. Gauding, Exam Developer

ITEMS OPENED, CLOSED, AND DISCUSSED

NONE

ADAMS DOCUMENTS REFERENCED

Accession No. ML113340040 – FINAL-Written Exam
Accession No. ML113340065 – FINAL-Operating Exam
Accession No. ML113350091– FINAL-Post Exam Comments and Resolutions