



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

September 16, 2020

Mr. Eric Carr  
President and Chief Nuclear Officer  
PSEG Nuclear, LLC  
P.O. Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNITS 1 AND 2 – INITIAL  
OPERATOR LICENSING EXAMINATION REPORT 05000272/2020301 AND  
05000311/2020301

Dear Mr. Carr:

On July 28, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Salem Nuclear Generating Station, Units 1 and 2. The enclosed examination report documents the examination results, which were discussed on August 19, 2020, with Messrs. Rick DeSanctis, Dan McHugh, and other members of your staff.

The examination included the evaluation of eight applicants for reactor operator licenses, and six 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 11. The license examiners determined that all fourteen of the applicants satisfied the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 55, and the appropriate licenses were issued on August 19, 2020.

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,

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X /RA/

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Signed by: Donald E. Jackson

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

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

Enclosure:  
Examination Report 05000272/2020301;  
05000311/2020301 w/Attachment:  
Supplementary Information

cc w/encl: Distribution via ListServ

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNITS 1 AND 2 – INITIAL OPERATOR LICENSING EXAMINATION REPORT 05000272/2020301 AND 05000311/2020301 DATED SEPTEMBER 16, 2020

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**EXAMINATION REPORT**

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

Dockets: 50-272, 50-311

Licenses: DPR-70, DPR-75

Report : 05000272/2020301; 05000311/2020301

Licensee: PSEG Nuclear, LLC

Facility: Salem Nuclear Generating Station, Units 1 and 2

Location: Hancocks Bridge, NJ 08038

Dates: July 13 – 20, 2020 (Operating Test Administration)  
July 28, 2020 (Written Examination Administration)  
July 31, 2020 (Licensee Submitted Post Exam Package)  
August 3, 2020 (NRC Examination Grading)  
August 19, 2020 (Licenses Issued)

Examiners: B. Fuller, Chief Examiner, Operations Branch  
T. Fish, Senior Operations Engineer  
D. Silk, Senior Operations Engineer  
M. Patel, Senior Reactor Inspector  
T. Hedigan, Operations Engineer  
P. Ott, Operations Engineer  
T. Wingfield, Operations Engineer

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

## SUMMARY

ER 05000272/2020301; 05000311/2020301; July 13 – 28, 2020; Salem Nuclear Generating Station, Units 1 and 2; Initial Operator Licensing Examination Report;

Seven NRC examiners evaluated the competency of eight applicants for reactor operator licenses and six applicants for instant senior reactor operator licenses at Salem Generating Station, Units 1 and 2. The NRC developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 11. The written examination was administered by the facility on July 28, 2020. NRC examiners administered the operating tests on July 13 – 20, 2020. The NRC examiners determined that all fourteen of the 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 Operator License Examination)

##### .1 License Applications

###### a. Scope

The examiners reviewed all fourteen 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 all fourteen 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 July 28, 2020, the licensee proctored the administration of the written examinations to all fourteen applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on July 31, 2020.

The NRC examination team administered the various portions of the operating examination to all fourteen applicants on July 13 - 20, 2020. The eight applicants for reactor operator licenses participated in two or 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 six applicants seeking an instant senior reactor operator license participated in 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 fourteen of the applicants passed all parts of the operating test. For the written examinations, the reactor operator applicants' average score was 93.5 percent and ranged from 89.3 to 96.0 percent, the senior operator applicants' average score was 90.3 percent and ranged from 84.0 to 97.0 percent. The overall written examination average was 92.1 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 the Attachment. In

accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for two years.

The NRC examiners completed the final grading of the written examination on August 3, 2020, 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. 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 the Attachment.

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 three questions that met these criteria and submitted the analysis to the chief examiner.

.3 Initial Licensing Examination Development

a. Examination Scope

The NRC developed the examinations in accordance with NUREG-1021, Revision 11. All licensee facility training and operations staff involved in examination preparation and validation were listed on a security agreement. The NRC submitted the draft examination package on April 26, 2020. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of June 15, 2020.

b. Findings

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 11 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. Rick DeSanctis, Operations Director, and other members of the licensee's management staff on August 19, 2020. The licensee acknowledged the findings 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**

D. McHugh, Operations Training Manager  
R. Chan, Nuclear Training Instructor

### **ITEMS OPENED, CLOSED, AND DISCUSSED**

#### **Opened**

NONE

#### **Opened and Closed**

NONE

#### **Closed**

NONE

#### **Discussed**

NONE

### **ADAMS DOCUMENTS REFERENCED**

Accession No. ML20240A318 – 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. ML20240A322 – FINAL- Operating Exam