



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

October 23, 2014

Mr. Timothy S. Rausch
Senior Vice President and Chief Nuclear Officer
PPL Susquehanna, LLC
769 Salem Blvd - NUCSB3
Berwick, PA 18603-0467

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 –
NRC INITIAL OPERATOR LICENSING EXAMINATION REPORT
05000387/2014301; 05000388/2014301

Dear Mr. Rausch:

On August 21, 2014, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Susquehanna Steam Electric Station, Units 1 and 2. The enclosed examination report documents the examination results, which were discussed on September 25, 2014, with Mr. Robert Franzen, General Manager Operations, and other members of your staff.

The examination included the evaluation of ten applicants for instant senior reactor operator licenses and one applicant for an upgrade senior reactor 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 eight of the eleven applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses were issued.

No findings were identified during this examination.

Three applicants for an instant senior reactor operator failed the written examination. One of these applicants also failed the operating examination. These applicants were denied licenses. Two applicants for an instant SRO license passed the exam but their licenses are being held based on their 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.

T. Rausch

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Sincerely,

/RA/

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

Docket Nos. 50-387; 50-388
License Nos. NPF-14; NPF-22

Enclosure:
Examination Report 05000387/2014301; 05000388/2014301
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

T. Rausch

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EXAMINATION REPORT

U.S. NUCLEAR REGULATORY COMMISSION REGION I

Dockets: 50-387, 50-388

Licenses: NPF-14; NPF-22

Report : 05000387/2014301; 05000388/2014301

Licensee: PPL Susquehanna, LLC

Facility: Susquehanna Steam Electric Station, Units 1 and 2

Location: Berwick, PA 18603-0467

Dates: 8/11-15/2014 (Operating Test Administration)
8/21/2014 (Written Examination Administration)
9/9/2014 (Licensee Submitted Post Exam Package)
9/25/2014 (NRC Examination Grading)
9/25/2014 (Licenses Issued)

Examiners: J.M. D'Antonio, Chief Examiner, Senior Operations Engineer
S. Hansell, Senior Resident Inspector, Peach Bottom
M. Patel, Operations Engineer
T. Dunn, Operations Engineer

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

SUMMARY

ER 05000387/2014301; 05000388/2014301; August 11-21, 2014; Susquehanna Steam Electric Station, Units 1 and 2; Initial Operator Licensing Examination Report.

Four NRC examiners evaluated the competency of ten applicants for instant senior reactor operator licenses, and one applicant for an upgrade senior reactor operator license at the Susquehanna Steam Electric Station Name, 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 August 21, 2014. NRC examiners administered the operating tests on August 11-15, 2014. The NRC examiners determined that eight of the eleven applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

NRC-Identified and Self-Revealing Findings

No findings were identified.

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 eleven 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 chief examiner also audited all 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.

a. Findings

No findings were identified.

.2 Operator Knowledge and Performance

a. Examination Scope

On August 21, 2014, the licensee proctored the administration of the written examinations to all eleven applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on September 9, 2014.

The NRC examination team administered the various portions of the operating examination to eleven applicants on August 11 - 15, 2014. The ten applicants seeking an instant senior reactor operator license participated in either 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. The one applicant for an upgrade senior reactor operator licenses 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.

b. Findings

Eight of the eleven applicants passed all parts of the examinations. Three senior reactor operator applicants failed the written examination. One of these applicants also failed the operating test. For the written examinations, the applicants' average score was 82 percent and ranged from 74 to 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 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 September 25, 2014, 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 all questions that met these criteria and submitted the analysis to the chief examiner.

The licensee submitted three post-examination questions comments on September 9, 2014. The NRC reviewed the facility's post-exam comment submittal package and accepted facility recommendations on the three questions. In all three cases, the NRC resolution was to accept two correct answers to the questions. The text of the examination questions, the licensee's examination analysis, and the licensee's post-examination comments with the NRC resolutions may be accessed in the ADAMS system under the accession numbers noted in the Attachment 1. In accordance with current NRC policy the release of this written examination will be delayed for two years.

.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 May 28, 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 August 18, 2014. 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 July 14, 2014. The licensee satisfactorily completed comment resolution prior to administration of the examinations.

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 DRS Operations Branch Chief presented the examination results to Mr. Robert Franzen, General Manager Operations, and other members of the licensee's management staff on September 25, 2014. 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

Corey Goff, Training Manager
Tallion Frenchy, Operations Training Manager
Derek Jones, Accreditation Manager
Bob Spadoni, ILT Supervisor

NRC Personnel

Jonathan Grieves, Senior Resident Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Opened and Closed

NONE

Closed

NONE

Discussed

NONE

ADAMS DOCUMENTS REFERENCED

Accession No. ML14282A476 – 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. ML14282A527 – FINAL-Operating Exam

Accession No. ML14281A555 – FINAL-Post Exam Comments, Resolutions, and Technical References (Note: In accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for two years.)