



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

January 29, 2018

Mr. Richard Bologna
Site Vice President
First Energy Nuclear Operating Company
Beaver Valley Power Station
P. O. Box 4
Shippingport, PA 15077-0004

SUBJECT: BEAVER VALLEY POWER STATION UNIT 2 – INITIAL OPERATOR LICENSING
EXAMINATION REPORT 05000412/2017301

Dear Mr. Bologna:

On November 15, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at the Beaver Valley Power Station Unit 2. The enclosed examination report documents the examination results, which were discussed with you and members of your staff on December 19, 2017.

The examination included the evaluation of seven applicants for reactor operator licenses, 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 11. The license examiners determined that all of the fourteen applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses were issued on December 19, 2017.

No findings were identified during this examination.

In accordance with Title 10 of "*Code of Federal Regulation (CFR)*," 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's 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 Nos. 50-412
License Nos. NPF-73

R. Bologna

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Enclosure:
Examination Report 05000412/2017301
w/Attachment: Supplementary Information

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SUBJECT: BEAVER VALLEY POWER STATION UNIT 2 – INITIAL OPERATOR LICENSING
EXAMINATION REPORT 05000412/2017301 DATED JANUARY 29, 2018

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

Dockets No. 50-412
License No. NPF-73
Report No. 05000412/2017301
Licensee: First Energy Nuclear Operating Company
Enterprise Identifier: I – 2017 – 301 - 011
Facility: Beaver Valley Unit 2
Location: Shippingport, PA 15077-0004
Dates: November 6 - 15, 2017 (Operating Test Administration)
November 17, 2017 (Written Examination Administration)
December 5, 2017 (Licensee Submitted Post Exam Package)
December 18, 2017 (NRC Examination Grading)
December 19, 2017 (Licenses Issued)

Examiners: J. D'Antonio Chief Examiner, Operations Branch
T. Fish, Senior Operations Engineer
B. Fuller, Senior Operations Engineer
T. Hedigan, Operations Engineer
C. Lally, Operations Engineer

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

Enclosure

SUMMARY

ER 05000412/2017301; 11/6/2017 - 12/19/ 2017; Beaver Valley Power Station, Unit 2 and Initial Operator Licensing Examination Report.

Five NRC examiners evaluated the competency of seven applicants for reactor operator licenses and seven applicants for instant senior reactor operator license licenses at Beaver Valley Power Station Unit 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 November 17, 2017. NRC examiners administered the operating tests on November 6 - 15, 2017. The NRC examiners determined that all 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 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 November 17, 2017, 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 December 5, 2017.

The NRC examination team administered the various portions of the operating examination to all fourteen applicants on November 6 - 15, 2017. The seven applicants for reactor operator licenses 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 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. All fourteen applicants passed the written examination. For the written examinations, the reactor operator applicants' average score was 86.28 percent and ranged from 80 to 94.66 percent, the senior operator applicants' average score was 85.28 percent and ranged from 82 to 91 percent. The overall written examination average was 85.78 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 December 18, 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. 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 one post-examination comment for one written question on December 5, 2017. The NRC reviewed the facility's post-exam comment submittal package and accepted the facility recommendation. The key answer was changed on Question 57 to accept two correct answer choices, "B" and "C". 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 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 complete draft examination package was submitted to the facility on August 28, 2017. The chief examiner reviewed facility comments on the draft examination package and incorporated comments as necessary. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of October 9, 2017.

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. Richard Bologna, Site Vice President, and other members of the licensee's management staff on December 19, 2017. The licensee acknowledged the findings presented.

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

ATTACHMENTS: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

FENOC's Personnel

W. Cothen, Site Training Manager
G. Pelka, Supervisor Nuclear Operations Training
T. Gaydosik, Fleet Exam Development Lead
M. Klingensmith, Staff Nuclear Operations Instructor
P. Eisenmann, Staff Nuclear Operations Instructor

NRC Personnel

J. Krafty, Senior Resident Inspector
J. D'Antonio, Chief Examiner

ITEMS OPENED, CLOSED, AND DISCUSSED

NONE.

ADAMS DOCUMENTS REFERENCED

Accession No. ML18019B174 – 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. ML18019B177 – FINAL-Operating Exam
Accession No. ML18019B173 – FINAL-Post Exam Comments, Resolutions, and Technical References