



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

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

February 17, 2016

Mr. Marty Richey  
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 - NRC INITIAL  
OPERATOR LICENSING EXAMINATION REPORT 05000412/2016301

Dear Mr. Richey:

On December 14, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Beaver Valley Power Station, Unit 2. The enclosed examination report documents the examination results, which were discussed on February 4, 2016, with Messrs. Loehlein and Gibson, and other members of your staff.

The examination included the evaluation of five applicants for reactor operator licenses and three 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 eight of the applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses were issued on February 4, 2016.

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 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

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

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 OPERATOR LICENSING EXAMINATION REPORT 05000412/2016301

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/RA/

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

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M. Richey

-2-

Docket No. 50-412  
License No. NPF-73

Enclosure: Examination Report 05000412/2016301  
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

M. Richey

-3-

Letter to Marty Richey from Donald Jackson

SUBJECT: BEAVER VALLEY POWER STATION, UNIT 2 - NRC INITIAL OPERATOR  
LICENSING EXAMINATION REPORT 05000412/2016301

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**EXAMINATION REPORT**

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

Docket: 50-412

License: NPF-73

Report : 05000412/2016301

Licensee: First Energy Nuclear Operating Company

Facility: Beaver Valley Power Station, Unit 2

Location: Shippingport, PA 15077-0004

Dates: 12/07/2015 - 12/11/2015 (Operating Test Administration)  
12/14/2015 (Written Examination Administration)  
12/29/2015 (Licensee Submitted Post Exam Package)  
12/15/2015 - 02/03/2016 (NRC Examination Grading)  
02/04/2016 (Licenses Issued)

Examiners: P. Presby, Chief Examiner, Operations Branch  
P. Ott, Operations Engineer  
T. Hedigan, Operations Engineer

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

## SUMMARY

ER 05000412/2016301; December 7-11, 2015, and December 14, 2015; Beaver Valley Power Station, Unit 2; Initial Operator Licensing Examination Report.

NRC examiners evaluated the competency of five applicants for reactor operator licenses and three applicants for instant senior reactor operator licenses at Beaver Valley Power Station, Unit 2. 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 December 14, 2015. NRC examiners administered the operating tests on December 7-11, 2015. The NRC examiners determined that all applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

No findings were identified.

## REPORT DETAILS

### 4. OTHER ACTIVITIES (OA)

#### 4OA5 Other Activities (Initial Operator License Examination)

##### .1 License Applications

###### a. Scope

The examiners reviewed all 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 three 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 December 14, 2015, the licensee proctored the administration of the written examinations to all applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on December 29, 2015.

The NRC examination team administered the various portions of the operating examination to all applicants on December 7-11, 2015. The five applicants for reactor operator licenses participated in at least two 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. The three applicants seeking an instant senior reactor operator license participated in at least two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 10 system tasks, and an administrative test consisting of five administrative tasks.

###### b. Findings

All of the applicants passed all parts of the operating test and the written examination. For the written examinations, the reactor operator applicants' average score was 84.66 percent and ranged from 80.82 to 93.15 percent, the senior operator applicants' average score was 86.73 percent and ranged from 84.69 to 88.78 percent. The overall written examination average was 85.44 percent. The written examination, the operating

Enclosure

test, 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 2 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 and submitted the analysis to the chief examiner.

The licensee submitted post-examination comments on five questions on December 29, 2015. The NRC reviewed the facility's post-exam comment submittal package and accepted facility recommendations on two of the five questions. Two answers were accepted as correct on each of two of these questions (Q#33 and Q#41). Another two of these questions were deleted from the exam (Q#29 and Q#59). And one of these questions was determined to be valid as administered and left unchanged (Q#12). The licensee's post-examination comments with the NRC resolution may be accessed in the ADAMS system under the accession number noted in Attachment 1.

### .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 September 9, 2015. 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 October 7, 2015. The NRC conducted an onsite validation of the operating examinations and provided comments on the written exam during the week of November 9, 2015. The licensee satisfactorily completed comment resolution on November 30, 2015.

#### 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, 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. Eric Loehlein, Manager Site Operations, Mr. Dave Gibson, Manager Site Training, and other members of the licensee's management staff on February 4, 2016. 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

E. Loehlein, Manager Site Operations  
D. Gibson, Manager Site Training  
D. Ronnenberg, Superintendent Operations Training  
E. McFarland, Supervisor Simulator Support  
T. Gaydosik, Fleet Exam Development Lead  
D. Held, Shift Manager - Exam Facility Representative  
G. Pelka, Supervisor Licensed Operator Initial Training  
P. Eisenmann, Staff Nuclear Operations Instructor - Exam Developer  
M. Klingensmith, Staff Nuclear Operations Instructor - Exam Developer

NRC Personnel

J. Krafty, Senior Resident Inspector

**ITEMS OPENED, CLOSED, AND DISCUSSED**

Opened

NONE

Closed

NONE

Discussed

NONE

**ADAMS DOCUMENTS REFERENCED**

Accession No. ML16034A193	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 2 years.)
Accession No. ML15355A238	FINAL-Operating Exam
Accession No. ML16034A473	FINAL-Post Exam Comments, Resolutions, and Technical References