



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

January 17, 2017

Mr. Anthony J. Vitale  
Site Vice President  
Entergy Nuclear Operations, Inc.  
Indian Point Energy Center  
450 Broadway, GSB  
P.O. Box 249  
Buchanan, NY 10511-0249

**SUBJECT: INDIAN POINT ENERGY CENTER, UNIT 2 – INITIAL OPERATOR LICENSING  
EXAMINATION REPORT 05000247/2016301**

Dear Mr. Vitale:

On November 3, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Indian Point Energy Center, Unit 2. The enclosed examination report documents the examination results, which were discussed on December 12, 2016, with Mr. Nick Lizzo, Director of Training, and other members of your staff.

The examination included the evaluation of one applicant for a reactor operator license and five applicants for instant senior reactor operator licenses. The written examinations and operating tests were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 10. The license examiners determined that all applicants satisfied the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 55, and the appropriate licenses were issued on December 13, 2016. One license was held pending completion of deferred eligibility requirements.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html#web-based-adams> and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

*/RA/*

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

Docket No. 50-247  
License No. DPR-26

cc w/encl: Distribution via ListServ

Enclosure:  
Examination Report 05000247/2016301  
w/Attachment: Supplementary Information

Letter to Mr. Anthony J. Vitale from Donald E. Jackson dated January 17, 2017

SUBJECT: INDIAN POINT ENERGY CENTER, UNIT 2 – INITIAL OPERATOR LICENSING EXAMINATION REPORT 05000247/2016301

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

Docket: 50-247  
License: DPR-26  
Report: 05000247/2016301  
Licensee: Entergy  
Facility: Indian Point Energy Center, Unit 2  
Location: Buchanan, NY 10511-0249

Dates: October 31 - November 3, 2016 (Operating Test Administration)  
November 8, 2016 (Written Examination Administration)  
November 17, 2016 (Licensee Submitted Post Exam Package)  
November 21, 2016 (NRC Examination Grading)  
December 12, 2016 (Licenses Issued)

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

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

## SUMMARY

ER 05000247/2016301; October 31 – November 8, 2016; Indian Point Energy Center Unit 2; Initial Operator Licensing Examination Report.

Three NRC examiners evaluated the competency of one applicant for a reactor operator license and five applicants for instant senior reactor operator licenses at Indian Point Energy Center, 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 November 8, 2016. The NRC examiners administered the operating tests on October 31 - November 3, 2016. The NRC examiners determined that all applicants satisfied the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 55, and the appropriate licenses have been issued. One license was held pending completion of deferred eligibility requirements.

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 six 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 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 8, 2016, the licensee proctored the administration of the written examinations to all six applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on November 17, 2016.

The NRC examination team administered the various portions of the operating tests to all applicants on October 31 - November 3, 2016. The one applicant for a reactor operator license 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 five 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 applicants passed all parts of the operating test. In accordance with current NRC policy, the public release of this operating test in Agencywide Documents Access and Management System (ADAMS) will be delayed for two years from the date of this Examination Report. All applicants passed the written examination. For the written examinations, the one reactor operator applicant's score was 86.66 percent. The senior operator applicants' average score was 86.8 percent and ranged from 84 to 91 percent. The overall written examination average was 86.77 percent. The text of the

examination questions, the licensee's examination analysis, and the licensee's post-examination comments may be accessed in ADAMS under the accession numbers noted in the Attachment.

The NRC examiners completed the final grading of the written examination on November 21, 2016, 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 public release of this written examination in ADAMS will be delayed for two years from the date of this Examination Report. The text of the examination questions, the licensee's examination analysis, and the licensee's post-examination comments may be accessed in ADAMS under the accession numbers noted in the Attachment.

Chapter ES-403 and Form ES-403-1 of NUREG-1021 requires 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.

### .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 examination and operating test outlines as scheduled. 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 September 1, 2016. The chief examiner reviewed the draft examination package against the requirements of NUREG-1021, and provided all comments to the licensee on the examination by the end of the onsite prep week. The NRC conducted an onsite validation of the operating test and provided written comments during the week of October 3, 2016. The licensee satisfactorily completed comment resolution prior to exam administration.

#### b. Findings

No findings were identified.

The NRC approved the initial examination outline and advised the licensee to proceed with the operating test development.

The examiners determined that the written examinations and operating tests initially submitted by the licensee were within the range of acceptability expected for a proposed examination.

### .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 DRS Operations Branch Chief presented the examination results to Mr. Nick Lizzo, Director of Training, and other members of the licensee's management staff on December 12, 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

N. Lizzo, Director of Training

NRC Personnel

J. D'Antonio, Chief Examiner

**ITEMS OPENED, CLOSED, AND DISCUSSED**

Opened

NONE

Closed

NONE

Discussed

NONE

**ADAMS DOCUMENTS REFERENCED**

Accession No. ML16365A042 – Final Written Examination and Answer Key

Accession No. ML16365A043 – Final Operating Test

Note: In accordance with current NRC policy, the public release of the written examination and operating test in ADAMS will be delayed for two years from the date of this Examination Report.