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

January 29, 2018

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 3 – INITIAL OPERATOR LICENSING EXAMINATION REPORT 05000286/2017301

Dear Mr. Vitale:

On November 7, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Indian Point Energy Center, Unit 3. The enclosed examination report documents the examination results, which were discussed on January 8, 2018, with Messrs. C. Chapin, C. Kocsis, and R. Walpole of your staff.

The examination included the evaluation of 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 four of the six applicants satisfied the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 55, and the appropriate licenses were issued on January 8, 2018.

No findings were identified during this examination.

Two applicants for an instant senior reactor operator license failed the written portion of the exam and were denied licenses.

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 and 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. 50-286
License No. DPR-64

Enclosure:
Examination Report 05000286/2017301
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

SUBJECT: INDIAN POINT ENERGY CENTER, UNIT 3 – INITIAL OPERATOR LICENSING EXAMINATION REPORT 05000286/2017301 dated January 29, 2018

DISTRIBUTION: (via email)
DLew, RA (R1ORAMAIL Resource)
DCollins, DRA (R1ORAMAIL Resource)
DPelton, DRP (R1DRPMAIL Resource)
MGray, DRP (R1DRPMAIL Resource)
JYerokun, DRS (R1DRSMAIL Resource)
BWelling, DRS (R1DRSMAIL Resource)
DSchroeder, DRP
TSetzer, DRP
MHenrion, DRP
MRossi, DRP
BHaagensen, DRP, SRI
ASiwy, DRP, RI
CSafouri, DRP, RI
DHochmuth, DRP, AA
JBowen, RI OEDO
RidsNrrPMIndianPoint Resource
RidsNrrDorlLpl1 Resource
ROPReports Resources

DOCUMENT NAME: G:\DRS\Operations Branch\SILK\Exam FY18-IP3 - Oct. 2017 (U01947)\Exam Report\Indian Point Unit 3 2017 INITIAL EXAM REPORT.docx
ADAMS PACKAGE NUMBER: **ML17090A347** ADAMS ACCESSION NUMBER: **ML18029A683**

☑ SUNSI Review		☑ Non-Sensitive ☐ Sensitive		☑ Publicly Available ☐ Non-Publicly Available	
OFFICE	RI/DRS	RI/DRS			
NAME	DSilk	DEJackson			
DATE	1/29/18	1/29/18			

OFFICIAL RECORD COPY

EXAMINATION REPORT

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Docket:	50-286
License:	DPR-64
Report:	05000286/2017301
Enterprise Identifier:	I-2017-301-0002
Licensee:	Entergy Nuclear operations, Inc.
Facility:	Indian Point Energy Center, Unit 3
Location:	Buchanan, NY 10511-0249
Dates:	October 30, 2017 – November 3, 2017 (Operating Test Administration) November 7, 2017 (Written Examination Administration) November 27, 2017 (Licensee Submitted Post Exam Package) January 3, 2018 (NRC Examination Grading) January 8, 2018 (Licenses Issued)
Examiners:	D. Silk, Chief Examiner, Operations Branch M. Patel, Operations Engineer P. Ott, Operations Engineer B. Tindell, Reactor Engineer (Under Instruction)
Approved By:	Donald E. Jackson, Chief Operations Branch Division of Reactor Safety

SUMMARY

ER 05000286/2017301; 10/30/2017 – 01/08/2018; Indian Point Energy Center, Unit 3; Initial Operator Licensing Examination Report

Three NRC examiners evaluated the competency of six applicants for instant senior reactor operator licenses at Indian Point Energy Center, Unit 3. The facility licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 11. The NRC examiners administered the operating tests on October 30, 2017 – November 3, 2017. The written examination was administered by the facility on November 7, 2017. The NRC examiners determined that two instant senior reactor operator license applicants did not satisfy the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 55 in that they failed the written examination. The licenses have been issued for the other four applicants.

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 a sample 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 7, 2017, 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 27, 2017.

The NRC examination team administered the various portions of the operating examination to all six applicants on October 30, 2017 – November 3, 2017. 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 six of the applicants passed all parts of the operating test. Two instant senior reactor operator applicants failed the written examination. For the written examinations, the overall examination average score was 82.29 percent and ranged from 78.35 to 86.59 percent. The text of the examination questions 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 January 3, 2018, and conducted a review of each missed question to determine the accuracy and validity of the examination questions. 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 20 questions that met these criteria and submitted the analysis to the chief examiner.

The licensee submitted post-examination comments for three written questions on November 27, 2017. The NRC reviewed the facility's post-exam comment submittal package and accepted the facility recommendations on all three of questions. Questions 21, 28, and 33 were deleted from the reactor operator exam. 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.

.3 Initial Licensing Examination Development

a. Examination Scope

The facility licensee 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 provided the facility licensee with the written exam outline on April 18, 2017. The facility licensee submitted operating examination outlines on June 2, 2017. 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 17, 2017. The chief examiner reviewed the draft examination package against the requirements of NUREG-1021, and provided comments to the licensee. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of October 2, 2017. The licensee satisfactorily completed comment resolution on October 24, 2017.

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. One issue identified during the preparation week is noted on Attachment 2 of the report.

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.

During the preparation week a potential exam security issue was identified by the licensee. A member of the facility licensee checked a locked door to the simulator booth and found it unlocked during the review of a simulator scenario. The door was clearly noted as an exam security area, but it was found unlocked. Because this had the potential to compromise the exam, the NRC examiners decided to delete this scenario from the exam and have the licensee develop a new scenario. The new scenario was made the spare and did not have to be used during exam administration. Since there was no actual exam compromise and the door was clearly marked as an exam security area, this issue was determined to be minor.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

The chief examiner presented the examination results to Mr. C. Chapin, Training Manager, and other members of the licensee on January 8, 2018. The licensee acknowledged the findings presented.

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

ATTACHMENTS:
1. SUPPLEMENTARY INFORMATION
2. SIMULATOR FIDELITY REPORT

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

C. Kocsis, ILO Training Superintendent
T. Jenkins, Nuclear Training Instructor

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Closed

NONE

Discussed

NONE

ADAMS DOCUMENTS REFERENCED

Accession No. ML18024B426 – 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. ML18024B428 – FINAL-Operating Exam (Note: In accordance with current NRC policy, the release of this operating examination in ADAMS to the public will be delayed for two years.)
Accession No. ML18024B424 – FINAL-Post Exam Comments, Resolutions, and Technical References

ES-501	Simulator Fidelity Report	Attachment 2

Facility Licensee: Entergy – Indian Point 3

Facility Docket No.: 50-286

Operating Test Administered on: 10/30/2017-11/3/2017

This form is to be used only to report observations. These observations do not constitute audit or inspection findings and, without further verification and review in accordance with IP 71111.11, are not indicative of noncompliance with 10 CFR 55.46. No licensee action is required in response to these observations.

While conducting the simulator portion of the operating tests, examiners observed the following items:

Item	Description
1	Loss of Vital Instrument Bus Malfunction caused the simulator to freeze.