

December 9, 2004

Mr. Fred Dacimo
Site Vice President
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
295 Broadway, Suite 1
P.O. Box 249
Buchanan, NY 10511-0249

SUBJECT: INDIAN POINT STATION, UNIT 2, REACTOR OPERATOR AND SENIOR
REACTOR OPERATOR INITIAL EXAMINATION REPORT NO.
05000247/2004301

Dear Mr. Dacimo:

This report transmits the results of the Reactor Operator (RO) and Senior Reactor Operator (SRO) licensing examination conducted by the NRC during the period of October 12-22, 2004. This examination addressed areas important to public health and safety and was developed and administered using the guidelines of the "Examination Standards for Power Reactors" (NUREG-1021, Draft Revision 9).

Based on the results of the examination, six of eight applicants passed all portions of the examination. One RO applicant and one SRO applicant did not pass their respective written exam. On November 13, 2004, final examination results, including individual license numbers for applicants that met eligibility requirements, were given during a telephone call between Mr. T. Fish and Mr. R. Christman of your staff.

In accordance with 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 document system (ADAMS). These records include the final examination and are available in ADAMS; RO and SRO Written - Accession Number ML043270578; RO and SRO Operating Section A - Accession Number ML043270586; RO and SRO Operating Section B - Accession Number ML043270594; and RO and SRO Operating Section C - Accession Number ML043270601. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Mr. Fred Dacimo

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Should you have any questions regarding this examination, please contact me at (610) 337-5183, or by E-mail at RJC@NRC.GOV.

Sincerely,

/RA/

Richard J. Conte, Chief
Operational Safety Branch
Division of Reactor Safety

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

Enclosure: Initial Examination Report No. 05000247/2004301

cc w/encl:

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M. Kapolwitz, Chairman of County Environment & Health Committee
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P. Gunter, Nuclear Information & Resource Service
P. Leventhal, The Nuclear Control Institute
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Mr. Fred Dacimo

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NAME	CBixler/ <i>THF for</i>		TFish/ <i>THF</i>		BMcDermott/ <i>BJM</i>		RConte/ <i>RJC</i>			
DATE	12/3/04		12/3/04		12/6/04		12/9/04			

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U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No: 50-247

License No: DPR-26

Report No: 05000247/2004301

Licensee: Entergy Nuclear Operations, Inc.

Facility: Indian Point Nuclear Power Plant, Unit 2

Dates: October 22, 2004 (Written Examination Administration)
October 12-19, 2004 (Operating Test Administration)
October 26, 2004 (Licensee submittal of written grades and post exam comment)
October 20-29, 2004 (Examination Grading)

Examiners: T. Fish, Sr. Operations Engineer (Chief Examiner)
J. D'Antonio, Operations Engineer
H. Balian, Operations Engineer
G. Johnson, Operations Engineer

Approved by: Richard J. Conte, Chief
Operational Safety Branch
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000247/2004301; 10/12/2004-10/22/2004; Indian Point Nuclear Power Plant, Unit 2; Initial Operator Licensing Examination. Six of eight applicants passed the examination (six instant SROs).

The written examinations were administered by the facility and the operating tests were administered by four NRC region-based examiners.

A. Inspector Identified Findings

No findings of significance were identified.

B. Licensee Identified Findings

No findings of significance were identified.

REPORT DETAILS

1. REACTOR SAFETY

Mitigating Systems - Reactor Operator (RO) and Senior Reactor Operator (SRO) Initial License Examination

a. Scope of Review

The IP2 training staff developed the written and operating initial examination and together with the NRC examination team and IP2 operations personnel verified or ensured, as applicable, the following:

- The examination was prepared and developed in accordance with the guidelines of Draft Revision 9 of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." A review was conducted both in the Region I office and at the IP2 training facility. Final resolution of comments and incorporation of test revisions were conducted during and following the onsite preparation week.
- Simulation facility operation was proper.
- A test item analysis was completed on the written examination for feedback into the systems approach to training program.
- Examination security requirements were met.

The NRC examiners administered the operating portion of the examination to all applicants from October 12-19, 2004. IP2 training staff administered the written examination on October 22, 2004 and submitted their grading on October 26, 2004. There were three post examination facility comments (Attachment 1, Facility Comments on Written Exam). NRC staff accepted the comments (Attachment 2, Resolution of Facility Comments on Written Exam) and modified the answer key accordingly.

b. Findings

Grading and Results

Six of eight applicants passed all portions of the initial licensing examination. One RO applicant and one SRO applicant did not pass their respective written exams.

Examination Administration and Performance

No significant administration or performance findings were identified.

4OA6 Meetings, including Exit

On November 13, 2004, the NRC provided conclusions and examination results to IP2 training management via telephone. License numbers for the applicants who passed and met eligibility requirements were also provided during this time. The NRC expressed appreciation for the cooperation and assistance that the licensee's training staff provided during the preparation and administration of the examination.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

R. Christman, Superintendent, Operations Training
S. Joubert, Supervisor, Initial License Training
W. Altic, Initial License Exam Developer
D. Huntington, Initial License Exam Developer

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>ITEM NUMBER</u>	<u>TYPE</u>	<u>DESCRIPTION</u>
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None

ATTACHMENT 1

FACILITY COMMENTS ON WRITTEN EXAM

Question 059

The following plant conditions exist on Unit 2:

Unit 2 is at 20% power.

Control rods are in MANUAL control.

Which one of the following describes two conditions that will prevent MANUAL OUTWARD movement of Control Bank D rods?

- A. Power Range Nuclear Power 20% (1/4), Overtemperature) T variable setpoint (1/4) exceeded.
- B. Intermediate Range Nuclear Power 20% equivalent (1/2), Overpower) T variable setpoint (1/4) exceeded.
- C. Overtemperature) T variable setpoint (1/4) exceeded, T_{AVE} - Avg T_{AVE} ($\pm 5^{\circ}\text{F}$).
- D. Overpower) T variable setpoint (1/4) exceeded, First Stage Turbine Impulse Pressure, PT-412A, less than 15% power equivalent (1/1).

Recommendation: Delete question from exam.

Justification: There is no correct answer. The Intermediate Range Rod Stop is blocked at 10% power in procedure 2-POP-1.3, step 4.34.5. The original question did not specify that the Intermediate Range Channels were not blocked at 10% power.

Resolution: The question was modified, subsequent to the examination, to specify that the Intermediate Range Channels were not blocked at 10% power.

Question 060

Which one of the following statements describes a design feature that prevents excessive loss of level in the spent fuel pool through the spent fuel pool cooling (SFPC) System?

- A. SFPC pumps will automatically trip when the low SFP level alarm is annunciated.
- B. SFPC discharge piping has a siphon breaker slightly below the normal water level.
- C. Deepest SFPC piping extends only 6 feet down into the SFP.
- D. Primary makeup valve to the SFP automatically opens on a low level in the SFP.

Recommendation: Accept B and C as correct answers

Justification: In response to a question from one of the applicants, the examination proctor inadvertently informed the applicant, and the other applicants as well, that distracter "C" referred to the suction piping of the Spent Fuel Pool Cooling System. Examinees were told to add "suction" to the distracter, i.e., Deepest "suction" SFPC piping extends only 6 feet into the SFP. This additional information made distracter "C" a true statement, and therefore also a correct answer.

Resolution: Question is satisfactory as written; no change/modification necessary. However, answer key was modified because of information the exam proctor inadvertently provided.

Question 067

What conditions must be met to reset a Containment Ventilation Isolation after a high containment air particulate or radiogas alarm has isolated the Containment Purge and Containment Pressure Relief lines in accordance with 2-SOP-5.4.3, Vapor Containment Purge?

- A. The containment air particulate and radiogas alarms, R41/42, are the only signals that must be clear prior to resetting the Containment Ventilation Isolation.
- B. Containment Phase A and R41/42 and R44 must be below the isolation setpoint prior to resetting the Containment Isolation.
- C. Safety Injection must be reset and R41/42 and R44 must be below the isolation setpoint prior to resetting the Containment Isolation.
- D. No conditions need to be met, the Containment Purge and Pressure Relief Lines do not close on a high containment air particulate or radiogas alarm.

Recommendation: Accept A and C as correct answers

Justification: The original question did not specifically note whether SI had occurred. Thus, there are two correct choices for this question: one choice if SI had occurred, and, therefore would need to be reset; another choice if (A) SI had not occurred, and therefore would not need to be reset.

Resolution: The question was modified, subsequent to the examination, to specify that SI has occurred following the Containment Purge and Containment Pressure Relief lines isolation.

ATTACHMENT 2

NRC RESOLUTION OF FACILITY COMMENTS ON WRITTEN EXAM

Contention 1 (Question 59): Comment accepted; question deleted.

NRC staff agrees with the facility's resolution. Based on the information provided by IP2 training staff, plant startup procedures direct the operators to block the Intermediate Range Rod Stop when reactor power level exceeds 10% power. Since the question did not specify that this action had or had not occurred, there was no correct answer for the question. The question was deleted

Contention 2 (Question 60): Comment accepted; there are two correct answers.

NRC staff agrees with the facility's resolution. The exam proctor mistakenly provided the applicants with additional information to one of the distractors, which inadvertently made one this distractor also correct. Therefore, two choices are correct for this question.

Contention 3 (Question 67): Comment accepted; there are two correct answers.

NRC staff agrees with the facility's resolution. The question did not specify whether Safety Injection had occurred. Without knowing this information, there are two possible choices - one choice is correct if SI had occurred; a different choice is also correct if SI had not occurred. Therefore, two choices are correct for this question.