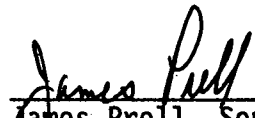


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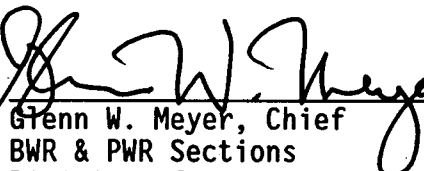
DOCKET/REPORT NO: 50-247/94-12(OL)
LICENSEE: Consolidated Edison Company of New York, Inc.
FACILITY: Indian Point Nuclear Station, Unit No. 2
Buchanan, New York
DATES: July 25-29, 1994
EXAMINER: D. K. Faris, Examiner, Battelle (PNL)

CHIEF EXAMINER:


James Prell, Senior Operations Engineer
PWR Section
Division of Reactor Safety

9-6-94
Date

APPROVED BY:


Glenn W. Meyer, Chief
BWR & PWR Sections
Division of Reactor Safety

9/9/94
Date

EXECUTIVE SUMMARY

Examination Report No. 50-247/94-12(OL)

From July 25 to July 29, 1994, two examiners administered examinations to six employees who had applied for licenses to operate the Indian Point Station, Unit 2. These examinations were developed and administered in accordance with Revision 7 to the Examiner Standards (NUREG-1021).

Operations

Initial licensing examinations were administered to six senior reactor operator - upgrade (SRO-U) candidates. During administration of the operating tests, the examiners noted that most of the candidates missed or performed out of sequence steps in the procedure they were using. In one case, an operator, acting in the SRO position during a simulator scenario, purposely ignored a caution step in the emergency operating procedure being used. Although this operator had been alerted to this caution step by another operator on the boards, he chose to ignore this caution and go outside the procedure. The steps that the operators missed or performed out of sequence did not result in serious plant degradation.

The examiners noted that there were a relatively few number of annunciated alarms present in the control room. This appeared to indicate an effective approach to addressing plant equipment problems.

Plant Support

The inspectors noticed the bright appearance and cleanliness of the plant during the plant walk through examinations of the candidates. Identification tags on the equipment and valves were easy to find and read.

DETAILS

1.0 INITIAL EXAMINATION RESULTS

	SRO Pass/Fail	TOTAL Pass/Fail
Written	6/0	6/0
Operating	6/0	6/0
Overall	6/0	6/0

2.0 EXAMINATION OVERVIEW

2.1 Written Examination

The written examinations were administered on July 25, 1994. These examinations were developed in accordance with the guidelines of 10 CFR 55.41, 55.43, and NUREG-1022, "Examiners Handbook for Developing Operator Licensing Written Examinations." All six candidates passed the written examination.

During a review of the graded written examinations, it was noted that four or more candidates missed the following questions. This information is being provided to assist the training department in upgrading their training program. A response to the below listed items is not needed.

- Minimum amount of time required before attempting a restart of a RCP, (reactor coolant pump).
- Minimum flow rate, which causes an automatic closure of component cooling water isolation valve FCV-625.
- Response of the reactor cooling system and charging and letdown systems to a pressurizer level transmitter failure.
- Minimum condenser pressure, which causes an automatic turbine and reactor trip to occur.
- Actions to be taken by independent verifier when he finds a valve required to be in the OPEN position in the CLOSED position.

2.2 Operating Test

The operating tests were administered from July 26 through July 28, 1994. The operating tests consisted of two dynamic simulator scenarios and five job performance measures (JPMs) per candidate. Two oral questions were asked at the completion of each JPM. Each candidate was also examined on the administrative requirements of Indian Point, Unit 2.

2.2.1 Dynamic Simulator Scenarios

The examiner assessed the candidates' performance in the simulator portion of the examination to be good; although, during both the simulator and JPM portions of the test, operators' use of procedures was sometimes weak. The examiners noted that most of the candidates missed or performed out of sequence steps in the procedure they were using. In one case, an operator, acting in the SRO position during a simulator scenario, purposely ignored a caution step in the emergency operating procedure (EOP) being used. Although this operator had been alerted to this caution step by another operator on the boards, he chose to ignore this caution and go outside the procedure. The steps that the operators missed or performed out of sequence did not result in serious plant degradation. Specifically, it appeared that the SRO ignored the caution step to maintain steam to the turbine driven auxiliary feedwater (AFW) pump because of concerns related to radiological consequences, rate of level increase in and carryover from the ruptured steam generator, steam generator tube stresses, etc. Although these concerns have some validity, they do not justify the loss of all feedwater caused by isolating the ruptured steam generator. Further guidance and training should be provided to this operator and other operators on the proper mitigation strategy to use in similar events.

All candidates maintained good overall awareness of plant and control board conditions and potential problems. Good communication skills were also exhibited. The six candidates all accurately classified the simulated events in accordance with emergency action levels (EALs).

2.2.2 Job Performance Measures and Plant Walkthrough

The candidates displayed acceptable knowledge of plant procedures and administrative control requirements. The candidates had some difficulty using SOP 1.7, "Reactor Coolant System Leakage Surveillance," for determining RCS leak rate. The difficulty appeared to be with correctly identifying whether the various mass changes that occur over a two-hour time span should be added or subtracted from each other. The examiners determined this was more of a procedural problem than a candidate lack of knowledge problem.

3.0 PREEXAMINATION REVIEW

The SRO written examination consisted of 100 questions written in the multiple choice format. Concerns raised by the facility during their preexam review on July 13, 1994, were subsequently resolved or incorporated into the exam in order to improve the quality of the exam and make it Indian Point, Unit 2, specific.

4.0 POST-EXAMINATION FACILITY COMMENTS AND SIMULATOR FIDELITY REPORT

Indian Point, Unit 2, provided post-examination comments to six questions from the written examination. Their comments and recommendations are included with this report as Attachment 1. For question numbers 3, 20 and 70 the facility

concluded that there were no correct answers. The NRC concurred and these three questions were deleted from the written examination. Facility comments on the remaining three questions were resolved as follows:

	Comment	Resolution
Q22	Correct answer is b. instead of a. to account for 80% power level.	NRC concurred that b. is the correct answer with power at 80%
Q29	Answer c. needed to be modified to more accurately identify it as the correct answer. Recommended that the question be deleted.	NRC did not concur. Alternative c. is the only possible correct answer. It should be noted all candidates correctly answered question.
Q53	Correct answer should be a. instead of d.	NRC concurred and changed answer key to reflect that the correct answer is a.

Attachment 2 contains the simulator fidelity report. There were no problems identified with simulator fidelity or performance during the examination.

5.0 EXIT MEETING ON JULY 29, 1994

The NRC expressed appreciation for the assistance provided by the training and operations departments during the preexam and exam week. The NRC also noted that the plant appeared clean and neat and the low number of alarms present on the annunciator panels in the control room. There were no concerns identified by either the facility or the NRC regarding the administration of the examination.

Indian Point, Unit 2, personnel

S. Bram	Vice President - Nuclear Power
W. Durr	Acting Operations Manager
F. Inzirillo	Manager - Operations Training
C. Jackson	Manager - Nuclear Safety and Licensing
T. Schmeiser	General Manager - Nuclear Power Generation

Attachments:

1. Facility Comments on Written Examination (w/o references)
2. Simulator Fidelity Report
3. SRO Examination and Answer Key

ATTACHMENT 1

FACILITY COMMENTS ON WRITTEN EXAMINATION