

U. S. NUCLEAR REGULATORY COMMISSION
OPERATOR LICENSING REQUALIFICATION PROGRAM EVALUATION REPORT

REQUALIFICATION EXAMINATION REPORT NO. 50-423/91-25 (OL-RQ)

FACILITY DOCKET NO. 50-423


FACILITY LICENSE NO. NPF-49

LICENSEE: Northeast Nuclear Energy Company
P. O. Box 270
Hartford, CT 06141-0270

FACILITY: Millstone 3

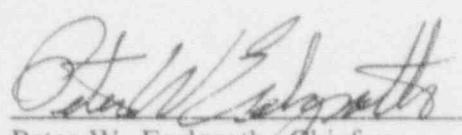
EXAMINATION DATES: December 2 - 6, 1991

CHIEF EXAMINER:


Kerry D. Ihnen, Operations Engineer
PWR Section, Operations Branch
Division of Reactor Safety

1-16-92
Date

APPROVED BY:


Peter W. Eselgroth, Chief
PWR Section, Operations Branch
Division of Reactor Safety

1-21-92
Date

SUMMARY: Written examinations and operating tests were administered to seven senior reactor operators (SRO's) and one reactor operator (RO). The examinations were graded concurrently and independently by the NRC and the facility training staff. As graded by the NRC, all individuals passed the simulator, written and walk-through examination. Because less than twelve operators were examined during this cycle, a programmatic evaluation will be deferred until inclusion of the next cycle of NRC administered requalification examinations.

A review of the licensed operator medical records was not conducted. The administration and implementation of this program per ANSI/ANS-3.4-1983 was inspected under the Millstone 2 report (50-336/91-31) during June 1991 and was determined to be adequate. The same department controls the implementation of this program; therefore, another inspection was not needed.

DETAILS

TYPE OF EXAMINATION: Requalification

1. INTRODUCTION AND OVERVIEW

During the week of November 20, 1991, the NRC exam team made a site visit to review the facility prepared examination material. The NRC team determined the examination material to be adequate. The sample plan was complete, the Job Performance Measures (JPMs), and simulator scenarios were job related and up to date. Minor changes were made to the simulator scenarios and the written exam.

During the week of December 2, 1991, written and operating requalification examinations were administered to seven Senior Reactor Operators (SRO) and one Reactor Operator (RO). These operators were divided into two crews. One of the crews consisted of four SROs and the other crew consisted of three SROs and one RO. The examinations were graded concurrently by the NRC and the facility training staff.

As graded by the NRC, all individuals and all crews passed their requalification examination. Because less than twelve operators were examined during this cycle, a programmatic evaluation will be deferred until inclusion of the next cycle of NRC administered requalification examinations.

As graded by the facility, seven individuals and both crews passed their requalification examination. One individual failed the simulator portion of the requalification exam due to competency weaknesses.

The NRC team determined the facility evaluators to be satisfactory. The NRC team appreciated the cooperation and professionalism of the licensee.

2.0 INDIVIDUAL EXAMINATION RESULTS

The following is a summary of the individual examination results:

NRC Grading	RO Pass/Fail	SRO Pass/Fail	TOTAL Pass/Fail
Written	1/0	7/0	8/0
Simulator	1/0	7/0	8/0
Walk-through	1/0	7/0	8/0
Overall	1/0	7/0	8/0

Facility Grading	RO Pass/Fail	SRO Pass/Fail	TOTAL Pass/Fail
Written	1/0	7/0	8/0
Simulator	1/0	6/1	7/1
Walk-through	1/0	7/0	8/0
Overall	1/0	6/1	7/1

3.0 PERSONS CONTACTED

Facility Station Personnel

- * C. Clement, Director, Millstone 3
- * B. Parrish, Assistant Supervisor, Operator Training
- W. Romburg, Vice President, Nuclear Operations
- B. Ruth, Manager, Operator Training
- * C. Ryan, Sr. Operator Instructor
- S. Scace, Director, Millstone Station
- * R. Stotts, Supervisor, Operator Training

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- * B. Doolittle, Technical Assistant, Commissioner Remick's Office
- * T. Guilfoil, Examiner (Sonalysts)
- * K. Ihnen, Chief Examiner
- D. Jaffe, Project Manager, NRR

* Denotes those present at the exit meeting conducted on December 6, 1991.

4.0 PROGRAM EVALUATION RESULTS

In accordance with NUREG-1021, Operator Licensing Examiner Standards, ES-601, "Administration of NRC Requalification Program Evaluation", a program evaluation required a minimum sample of at least twelve licensed operators. Since the sample size of this cycle of examinations was eight operators, the program evaluation will be deferred until the next cycle of NRC administered requalification examinations. Based on the above results, there were no indications of a need to examine additional operators at this time.

4.1 Programmatic Strengths and Weaknesses

A. Programmatic Strengths

- Good up-front planning
- Good Examination security

B. Programmatic Weaknesses

- JPMs should be reviewed to ensure conformity with the requirements in the Examiner Standards for time critical tasks and JPM question content.
- Operations representative assigned to the exam team did not become involved in the exam review during the prep week.
- The written exam answer key contained many mistakes that needed to be corrected.

4.2 Operator Strengths and Weaknesses

These were strengths and weaknesses observed more than once during the conduct of the examination.

4.2.1 Operating Examination

A. Operator Strengths

- Emergency Operating Procedure use
- Knowledge of EOP Entry conditions
- Face-to-face communications

B. Operator Weaknesses

- Procedural steps were not always followed as written. No adverse consequences resulted.

4.2.2 Walk-through

A. Operator Strengths

- Ability to implement procedures to accomplish JPMs.

B. Operator Weaknesses

- Two individuals did not perform the procedure as written when performing tasks associated with filling of a Safety Injection Accumulator Tank

4.2.3 Written

A. Strengths

- In-depth knowledge of integrated systems.

B. Weaknesses

- none noted

5.0 MEDICAL CERTIFICATION PROGRAM FOR LICENSED OPERATORS INSPECTION

An inspection of the licensee's program for medical certification and monitoring of licensed operators per 10 CFR 55.53(i) and ANSI/ANS-3.4-1983 requirements was not performed. A review of the programmatic controls was made during the recent Unit 2 requalification exam, report no. 50-336/91-13(OL-RQ). The program was determined to be adequate and no discrepancies were identified in that report.

6.0 SIMULATOR PERFORMANCE

This section is used only to report observations. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of non-compliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information which may be used in future evaluations. No licensee action is required in response to these observations.

6.1 Simulator Fidelity

The following two discrepancies were identified during the administration of the simulator and walk-through portions of the exam.

- A. The panel indication lights for the CRDM cooling fans stay lit even when the control switches for these fans are placed in the pull-to-lock position.
- B. The train A ECCS pump room area air conditioning unit (3HVQ*AAACUS1A) was found to be incorrectly modeled.

6.2 Simulator Performance

- A. A momentary loss of electrical power to the Training Center occurred during the first scenario administered to the staff crew. The power loss was of sufficient magnitude and duration to trip and lock out the power supply breakers for the simulator and process computer mainframes. The system was rebooted and operationally tested in approximately 15 minutes. The scenario was reconstructed and the exam was continued from the point where the interruption occurred.
- B. Near the end of the Steam Generator Tube Rupture scenario, the simulator automatically froze when steam generator pressure exceeded the simulator modeling operating limit. The purpose of this feature is to alert the instructors and students that the model is being operated in a region where the simulation may not conform to physical law or plant conditions. The scenario was stopped at this point, with no changes required in the administration of the scenario as all critical tasks had been performed.

7.0 EXIT MEETING

An exit meeting was conducted December 6, 1991, at the Northeast Utilities training center. Personnel in attendance are noted in paragraph 3 of this report. A summary of the weeks activities was presented and discussed, including the items mentioned above. The licensee provided the NRC with their preliminary results for the requalification exam.

Attachment: Northeast Utilities Ltr MP-91-1061, dated December 20, 1991