

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

REQUALIFICATION EXAMINATION REPORT NO. 50-336/92-11 (OL-RQ)

FACILITY DOCKET NO. 50-336


FACILITY LICENSE NO. DRP-65

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

FACILITY: Millstone 2

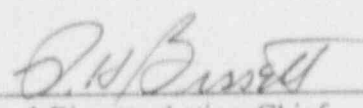
EXAMINATION DATES: April 7 - 9, 1992

CHIEF EXAMINER:


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

5/14/92
Date

APPROVED BY :


Paul Bissett, Acting Chief
PWR Section, Operations Branch
Division of Reactor Safety

5/14/92
Date

SUMMARY: Written examinations and operating tests were administered to six Senior Reactor Operators (SRO's) and three Reactor Operators (RO's). 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 walkthrough examination. Because fewer than twelve operators were examined during this cycle, a programmatic evaluation will be deferred until inclusion of the next NRC administered requalification examination.

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 and documented under Millstone 2 Report No. 50-336/91-31 during June 1991 and was determined to be adequate.

DETAILS

TYPE OF EXAMINATION: Requalification

1.0 INTRODUCTION AND OVERVIEW

During the week of March 23, 1992, 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. Some duplication of topics existed on the different portions of the exam and minor changes were made. The simulator scenarios were reviewed and only minor changes were made to the initial conditions and to the critical task identification.

During the week of April 6, 1992, written and operating requalification examinations were administered to six Senior Reactor Operators (SRO) and three Reactor Operators (RO). These operators were divided into two crews. One of the crews consisted of three SROs and two ROs, 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 and the facility, all individuals and all crews passed their requalification examination. Because fewer than twelve operators were examined during this cycle, a programmatic evaluation will be deferred until inclusion of the next NRC administered requalification examination.

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	3/0	6/0	9/0
Simulator	3/0	6/0	9/0
Walk-Through	3/0	6/0	9/0
Overall	3/0	6/0	9/0

FACILITY Grading	RO Pass/Fail	SRO Pass/Fail	TOTAL Pass/Fail
Written	3/0	6/0	9/0
Simulator	3/0	6/0	9/0
Walk-Through	3/0	6/0	9/0
Overall	3/0	6/0	9/0

3.0 PERSONS CONTACTED

Facility Station Personnel

*A. Bender	Operator Training
*D. Emborsky	Supervisor Control Operator
*S. Jackson	Public Information, Northeast Utilities
*J. Keenan	Director Millstone 2
*B. Ruth	Manager, Operator Training
*J. Smith	Operations Manager
*R. Spurr	Acting Supervisor, Operator Training

U. S. Nuclear Regulatory Commission

* K. Faris	Examiner (PNL)
* R. Pugh	Examiner (PNL)

* Denotes those present at the exit meeting conducted on April 9, 1992.

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 requires a minimum sample of at least twelve licensed operators. Since the sample size of this cycle of examinations was nine operators, the program evaluation will be deferred until the next NRC administered requalification examination. 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

- The written exams and the JPM questions contained some duplication of topics. If duplication of topics is warranted by the sample plan, then it is acceptable. If the sample plan does not support such duplication, then it should not occur.

4.2 Operator Strengths and Weaknesses

The following 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 (EOP) use.
- Knowledge of EOP Entry conditions.
- Face-to-face communications, teamwork, and crew interactions.

B. Operator Weaknesses

- One crew chose the Functional Recovery Procedure, EOP-2540, when the use of the Optimum Recovery Procedure, EOP 2532 would have been more efficient.

4.2.2 Walk-Through

A. Operator Strength

- Ability to implement procedures to accomplish JPMs.

B. Operator Weakness

- Two individuals did not correctly perform the tasks associated with placing a battery charger in operation.

4.2.3 Written

A. Strength

- In-depth knowledge of integrated systems.

B. Weaknesses

Provided below is a list of generic weaknesses identified from the grading of the written examination. (NOTE: A weakness is defined when 50% or greater of the possible points for a given question were missed by the candidates.) This information is being provided to assist in upgrading initial and requalification training programs. No licensee response to these items is required.

- Question bank number 2399 regarding engineered safety features system (ESF) flow rate determination when in a degraded containment condition.
- Question bank number 3506 regarding interpretation of the Reactor Coolant System pressure and temperature curves when performing the Excess Steam Demand Emergency Operating Procedure (EOP-2536).

The static exam that contained the above two questions (SRO static exam A) had results that were significantly lower than the overall results. The average on this particular static exam was 81%.

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 previous 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 FIDELITY REPORT

The simulator performed well during the dynamic simulator examinations. There were no identified modeling problems.

7.0 EXIT MEETING

An exit meeting was conducted April 9, 1992, 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, including a discussion of operator pass/fail decisions.

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLDING WATERWORKS COMPANY
NORTHEAST UTILITIES SERVICE CO. (P.A.)
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Selden Street, Berlin, Connecticut

P. O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 665-5000

April 27, 1992
MP-92-428 ✓

RE: NUREG 1021, ES-601

Mr. Lee K. Bettenhausen
Chief, Operations Branch, DRS
U. S. Nuclear Regulatory Commission, Region 1
475 Allendale Road
King of Prussia, PA 19406

REFERENCE: Facility Operating License No. DPR-65
Docket No. 50-336
NRC Requalification Examination Summary

Dear Mr. Bettenhausen:

During the week of April 6, 1992, Licensed Operator Requalification Examinations were administered to nine Millstone Unit 2 Licensed Operators and Senior Licensed Operators. These examinations were conducted in accordance with the applicable sections of NUREG 1021, Operator Licensing Examiner Standards. Accordingly, the examinations were prepared, administered, and evaluated by both NRC and facility examiners.

Preliminary results of the facility evaluations for all portions of the examination were provided to Mr. Kerry Ihnen, NRC Chief Examiner, on April 9, 1992. Based on our review of the exam grading, these results can be considered final. Attached is a summary of our grades.

An evaluation of the examination results was performed to identify strengths and weaknesses, both individual and crew, and to identify necessary remediation and enhancements to the MP2 Licensed Operator Requalification Program content. The following is a summary, by examination environment, of the evaluation:

SIMULATOR EXAMINATIONS

STRENGTHS:

- o Teamwork, communications and crew interaction. Where appropriate, team members were involved in decision-making and shared with each other information concerning event strategy and inter-watchstation operations. Individual team members operated within their pre-defined roles.

- o Proper selection and implementation of abnormal and emergency operating procedures.
- o Timely and correct referral to technical specifications.
- o Attention to annunciators and use of the alarm response procedures.
- o Manipulation of controls, both while referring to the procedures and when taking actions from memory.
- o Diagnosis of events, both major and minor.
- o Event classification in accordance with the emergency plan

WEAKNESSES:

None of the weaknesses listed below are considered of such significance that they require formal individual or crew remediation. Where appropriate, increased emphasis will be placed on these items during simulator training sessions.

- o One instance of inadequate attention to RCS temperature control while using atmospheric dump valves in local manual during a Station Blackout event.
- o One crew tripped RCP's prematurely at 1750 vice 1600 psia, but no complications resulted.
- o Technical Specification Action Statement log entries. Minor administrative errors were occasionally made.
- o One instance of less-than-optimal EOP selection. EOP 2540, Functional Recovery, was chosen for entry when EOP 2532, LOCA, would have been more efficient.

WALKTHROUGH EXAMINATION

In general, the examinees demonstrated a high degree of proficiency and knowledge for the tasks examined. One in-plant JPM was performed incorrectly by two of the three licensees to whom it was administered. Although the failures occurred for different reasons, the task warrants additional emphasis during future in-plant training sessions.

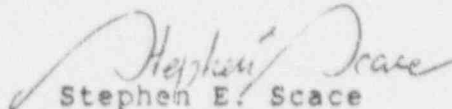
WRITTEN EXAMINATION

Examinee performance on the written examination was generally excellent, showing a sound mastery of the learning objectives examined. One examinee, though achieving a passing score, scored significantly below the other examinees. Individual remediation is planned for the areas of weakness identified. A high percentage of examinees lost credit on six questions: #2399, 2800, 2853, 3272, 3506, and 3509. The associated knowledge deficiencies will be addressed in upcoming requalification training.

During the administration of the examination, the exam key for one static question was modified to provide an acceptable tolerance range for readings obtained from analog meters. Additionally, one static question was substituted.

Yours Truly,

NORTHEAST NUCLEAR ENERGY COMPANY



Stephen E. Scace
Station Director

Millstone Nuclear Power Station

Attachment
SES/RNS/dsb

c: Document Control Desk, US NRC
B. W. Ruth, Manager, Operator Training
R. M. Kacich, Director, Nuclear Licensing, NU
K. Ihnen, US NRC
W. J. Raymond, NRC Resident Inspector

LORT EXAMINATION SUMMARY
WEEK OF APRIL 6, 1992

NAME	SIMULATOR	SS 32/35	SS 33/34	OPEN REFERENCE	WRITTEN TOTAL	JPM's	JPM QUESTIONS	JPM TOTAL
OPERATOR A	S	21.2	17.8	50	89	75	25	100
OPERATOR B	S	24.2	17.1	50	91.3	75	25	100
OPERATOR C	S	25	23.4	50	98.4	60	25	85
OPERATOR D	S	19	21.16	40	80.16	60	22.5	82.5
OPERATOR E	S	22.1	25	46	93.1	60	22.5	82.5
OPERATOR F	S	22.15	18	48	88.15	75	22.5	97.5
OPERATOR G	S	25	21.4	44	90.4	75	25	100
OPERATOR H	S	24.2	25	44	93.2	75	22.5	97.5
OPERATOR J	S	23.1	23.2	50	96.3	75	25	100
AVERAGE		22.88	21.34	46.9	91.1	70	23.9	93.9