

U.S. NUCLEAR REGULATORY COMMISSION REGION I
OPERATOR LICENSING REQUALIFICATION EXAMINATION REPORT

REPORT NO. 50-423/92-25 (OL-RQ)
LICENSE NO. NPF-49
LICENSEE: Northeast Nuclear Energy Company
FACILITY: Millstone Nuclear Power Station, Unit 3
DATES: November 16-19, 1992

CHIEF EXAMINER:

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12/16/92
Date

EXAMINER:

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12/21/92
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APPROVED BY:

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12/21/92
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SUMMARY: Requalification written examinations and operating tests were administered to two senior reactor operators (SROs) and two reactor operators (ROs). These examinations were administered in accordance with proposed Revision 7 to NUREG-1021. All four operators passed their examinations. The two SROs and two ROs also operated successfully as a crew during two simulator scenarios. The results from this examination were combined with the results of the previous requalification examination administered in December 1991 in order to perform a program evaluation of the requalification training program. Seven SROs

and one RO were examined during the December 1991 examination, and all eight operators passed all portions of the examination. A program evaluation, however, had been deferred until completion of this year's examination, since a total of 12 licensed operators is needed for a program evaluation.

Based upon the results of 12 licensed operators having been examined and successfully passing all portions of the examination, including the evaluation of 3 operating crews during the simulator evaluation, Millstone 3's licensed operator requalification training program was determined to be satisfactory.

In conjunction with this examination, the examiners inspected the programmatic aspects of the MP-3's licensed operator requalification training program. The purpose of this inspection was to ascertain whether there existed any generic deficiencies that were common with those identified during the Millstone 1 unsatisfactory licensed operator requalification program. Upon completion of this inspection, it was determined that there were not any significant deficiencies similar to those identified with the Millstone 1 requalification training program. Some minor deficiencies, however, were identified, but were not considered to be significant enough to jeopardize the adequacy of the training program.

DETAILS

TYPE OF EXAMINATION: Requalification

1.0 EXAMINATION RESULTS:

	RO Pass/Fail	SRO Pass/Fail	Total Pass/Fail
Written	2/0	2/0	4/0
Simulator	2/0	2/0	4/0
Walk-through	2/0	2/0	4/0
Overall	2/0	2/0	4/0

The examination results noted above reflect 100% agreement between the NRC evaluators and the Millstone Plant-3 evaluators.

2.0 PROGRAM EVALUATION RESULTS:

2.1 Background

On October 15, 1992, representatives from the Millstone Plant, Unit 3 (MP-3) training department met in Region I with the NRC to discuss the scheduled November 1992 requalification examination. The purpose of the meeting was to discuss various aspects of the proposed Revision 7 to the Examiner Standards, under which the requalification examination would be conducted. The majority of discussion dealt with major differences between the approved Revision 6 and the proposed Revision 7.

Further discussion dealt with administrative aspects of the examination. It was noted that results from the December 1991 requalification examination, in which eight licensed operators were examined, would be combined with the results of the upcoming November 1992 examination. A minimum of twelve licensed operators are needed in order for the NRC to make a training program evaluation. Four operators were scheduled for the November 1992 examination; and, when combined with the December 1991 examination, the minimum total of twelve operators examined would be met. Thus, a program evaluation could be performed.

From November 2 - 6, 1992, the NRC reviewed the proposed examination with MP-3 training and operations representatives at the MP-3 site. This detailed review included a review of the adequacy of the written examination questions, a walkdown of all job performance measures (JPMs) and the validation of the simulator scenarios. The validation of the simulator scenarios included a review of expected operator actions and the validity of designated crew critical tasks.

2.2 Overall Rating: Satisfactory

The Millstone Plant, Unit 3 (MP-3) program for licensed operator requalification training was rated satisfactory in accordance with the criteria established in the proposed Revision 7 of ES-601, "Administration of NRC Requalification Program Evaluation." Those criteria are as follows:

- A. At least 75% of all operators pass all portions of the examination. This number includes operators who participate in the simulator examination for the purpose of meeting crew composition requirements.

NRC grading is the only consideration for this criterion. There were no individuals who participated in the simulator portion of the examination in order to meet crew requirements. Twelve of twelve operators (100%) passed the examination.

- B. At least two-thirds (66%) of the crews pass the simulator examination.

NRC grading is the only consideration for this criterion. Three crews were evaluated, and all three crews (100%) passed the simulator portion of the operating examination.

The requalification program met these criteria.

2.3 Programmatic Strengths and Weaknesses

A. Strengths:

MP-3 training evaluators were very knowledgeable in all aspects of the exam process and presented themselves in a very professional manner during the administration of the exam. The training department also interfaced extremely well with the operations department.

B. Weaknesses:

Quality assurance reviews of examination material need to be strengthened prior to administration of the examination. Just prior to the administration of the written examination, it was determined that a couple of replacement questions had not been included in the SRO exam as requested by the examiners.

The examiners considered one proposed JPM to be too simple a task and was an inadequate tool to evaluate an operator's competency. Although the task was of importance and had a high knowledge/abilities value, the JPM itself did little from an evaluative standpoint. This particular JPM was subsequently broadened in scope and depth, validated, and utilized during the examination.

Scheduling of JPM performance (time and location) warrants additional attention for future examinations. Two operators had to wait an excessive amount of time while awaiting the start of their inplant JPMs. MP-3 training should be especially sensitive to this issue, since excessive delays add to undue operator stress.

4.0 REQUALIFICATION TRAINING PROGRAM INSPECTION

As a result of the Millstone 1 unsatisfactory requalification training program evaluation and the fact that MP-1 and MP-3 operate from the same training facility and under the same organizational structure, it was determined that an inspection of the MP-3 requalification training program was warranted. The purpose of the inspection was to determine if any problems identified with the MP-1 requalification training program were also generic to the MP-3 training program.

During the conduct of this inspection, administrative reviews were performed, annual MP-3 testing of licensed operators was observed, and discussions were held by the inspector with both the training and operations personnel. During discussions with the operations department supervision, it was determined that they were taking an active role in assuring that their operators receive the training necessary to maintain a proficiency deemed necessary to operate the plant in a safe manner. On a weekly basis, the operations manager, or his designee, participates with the training department in a simulator evaluation of the crew that just completed a week of requalification training. These evaluations are treated as if they were annual licensed operator requalification examinations. Crew Performance that has been deemed less than acceptable requires that the crew or operator participate in an upgrade program designed to correct their identified areas of weaknesses.

It was noted that management, both training and operations, up through the Director of Nuclear Training and Executive Vice-President of Operations observe simulator training for MP-3 licensed operators.

As part of the MP-3's annual licensed operator requalification examinations, the inspector observed the performance of two simulator scenarios by one operating crew. Also observed was the debriefing conducted by the operations and training evaluators in regard to the crew's performance during the two scenarios. The evaluators stressed the area of communications as an identified area of weakness. The operations manager informed the inspector that he was in the process of developing a conduct of operations procedure that would address the area of communications. It was realized that there was no uniformity amongst crews or individuals when it came to communications. Because MP-3 has no formal communication standards, management has nothing to judge a crew's performance against and the operators have no formalized communication goals to strive for. The operations manager expects that improvement in communications will be realized once the communication's standard is approved and applied.

The inspector observed the performance of several JPMs and noted that they were performed and evaluated as if they were part of a NRC requalification examination. The MP-3 training department stated that they routinely schedule training on both the performance of any given JPM and on the proper techniques of performing a JPM.

The inspector performed a review of the MP-3's written examination bank. This review was for the purpose of verifying the adequacy of examination questions in regard to level of difficulty, structure, content, etc. Approximately 40% of the existing bank questions were selected for review. Of this 40%, approximately 60% of the questions were written as essay questions. The licensee stated that they are, and have been, reviewing the question bank and are either replacing the questions with newly written multiple choice questions or revising the existing essay questions to conform to the multiple choice question format.

The inspector also verified that MP-3 was conducting their requalification program in accordance with the programmatic description as detailed in NTM 3.08, "LORT Program Implementing Procedure." For those areas reviewed, it appeared as if MP-3 training was, for the most part, implementing their training program as described. However, the procedure was not current in its description of how the grading was accomplished for the "A" & "B" sections of the written examinations. NTM 3.08 presently states that each section makes up one-half of the total written grade; but, with the changes that occurred as a result of Revision 7 to the Examiner Standards, this is no longer true. Grading of the two sections of the written examination should be based upon compensatory grading techniques. The training supervisor later informed the inspector that compensatory grading was utilized in the grading of the examinations; however, the procedure had not been revised to reflect this.

Overall, it appears that MP-3 is adequately implementing their licensed operator requalification training program. As detailed above, certain areas warrant improvement, i.e., written examination question bank; however, no areas were identified as being inadequate to the point of having a detrimental effect on the training of MP-3's licensed operators.

5.0 EXIT MEETING

On November 19, 1992, at the conclusion of the requalification examination, the NRC conducted an exit meeting at the Millstone training facility. Those personnel in attendance are noted in paragraph 6.0 of this report. Examination development and conduct, general observations noted during the exam, and programmatic strengths and weaknesses were discussed. Examination results, as determined by both the NRC and MP-3, were also discussed. Additionally, the conclusions reached by the examiner following his review of the implementation of the requalification training program for MP-3 were presented.

6.0 KEY PERSONNEL CONTACTED:

Northeast Nuclear Energy Company

- * J. Black Director, Nuclear Training
- * C. Clement Director, M. S.
- * B. Parrish Assistant Supervisor, Operator Training
- M. Pearson Operations Manager, MP-3
- * B. Ruth Manager, Operator Training
- * C. Ryan Senior Operator - Instructor
- * R. Stotts Training Supervisor, MP-3

U. S. Nuclear Regulatory Commission

- * P. Bissett Senior Operations Engineer
- W. Maier Operations Engineer

* Denotes those present at the exit meeting conducted November 19, 1992.