

U. S. NUCLEAR REGULATORY COMMISSION REGION I
HOPE CREEK REQUALIFICATION PROGRAM EVALUATION

Report No. 50-354/91-10 (OL)
Facility Docket No. 50-354
Facility License No. NPF-57
Licensee: Public Service Electric and Gas
Post Office Box 236
Hancocks Bridge, New Jersey
Facility Name: Hope Creek
Examination Dates: June 3 - 6, 1991
Examiners: S. Pullani, Sr. Operations Engineer
T. Hunt, *NEL

Chief Examiner: Todd Fish 7/19/91
Todd Fish, Sr. Operations Engineer date

Approved by: Richard J. Conte 7/19/91
Richard J. Conte, Chief date
BWR Section, Operations Branch

Examination Summary: Requalification examinations were administered to six reactor operators (ROs) and nine senior reactor operators (SROs). These operators were divided into two shift crews - each comprised of three SROs and three ROs - and one staff crew comprised of three SROs. The examinations were graded concurrently by the NRC and the facility's training staff. As graded by the NRC, fourteen of fifteen operators passed all portions of the examination, and all crews were determined to be satisfactory. A weakness in the Job Performance Measure (JPM) portion of the exam was discussed with the facility for feedback to their training program. This weakness dealt with the clarity of JPM required actions, JPM questions, and with consistent application of JPM cues for simulated versus nonsimulated JPMs.

The facility's licensed operator training program was determined to be satisfactory based on the criteria established in section ES-601 of NUREG-1021, Rev. 6.

DETAILS

1.0 INTRODUCTION

The NRC administered requalification examinations to 15 licensed operators (6 ROs and 9 SROs). Two operating crews and one staff crew were evaluated. The examiners used the process and criteria described in NUREG-1021, "Operator Licensing Examiner Standard," Rev. 6.

The personnel contacted during the examination are listed below. The members of the combined NRC/facility examination team, and the facility evaluators are also identified.

The examination was conducted without any major problems or delays. The examination content as administered is summarized in Attachment 1. The facility results were transmitted to the NRC in a letter dated June 17, 1991.

2.0 PERSONS CONTACTED

Public Service Electric and Gas

C. Bauer, Training Supervisor	(1, 2)
W. Gott, Principal Training Supervisor	(1, 2)
R. Hovey, Operations Manager	(1, 2)
G. Mecchi, Principal Trainer, Operations	(2)
A. Orticelle, Manager, Nuclear Training	(2)
E. Parker, Senior Nuclear Instructor	(1, 2)
G. Wynn, Senior Nuclear Instructor	(1, 2)

Nuclear Regulatory Commission

T. Johnson, Senior Resident Inspector, Hope Creek	(2)
T. Fish, Senior Operations Engineer	(1, 2)
S. Pullani, Senior Operations Engineer	(1)
T. Hunt, INEL (Contractor)	(1)

Notes:

- (1) Member examination team
- (2) Attended exit meeting June 7, 1991

3.0 EXAMINATION RESULTS3.1 Requalification Individual Results

The following is a summary of the individual examination NRC and facility results:

TYPE OF EX/MINATION: Requalification

NRC GRADING

NRC Grading	RO Pass/Fail	SRO Pass/Fail	TOTAL Pass/Fail
Written	6/0	9/0	15/0
Simulator	6/0	9/0	15/0
Walk-Through	6/0	8/1	14/1
Overall	6/0	8/1	14/1

FACILITY GRADING

Facility Grading	RO Pass/Fail	SRO Pass/Fail	TOTAL Pass/Fail
Written	6/0	9/0	15/0
Simulator	5/1	8/1	13/2
Walk-Through	5/1	8/1	13/2
Overall	4/2	8/1	12/3

3.2 Generic Strengths and Weaknesses

The following is a summary of generic strengths and weaknesses noted by the NRC from the results of the individual requalification examinations. This information is being provided to aid the licensee in upgrading the requalification training program. No response to these generic strengths and weaknesses is required.

The overall results of the examinations indicated a strong performance by both the operators and the training department. An area of weakness was in the Job Performance Measure (JPM) portion of the exam as noted below:

- 1) JPM questions - About 40% of the questions were modified to improve the question's clarity, more clearly bound the scope of the answer required, or to include additional possible answers. The level of difficulty also varied widely, from questions requiring simple one or two word answers to questions requiring lengthy discussion answers.
- 2) JPM cues - The scripting and use of evaluator cues was inconsistent. Cues were lacking for JPMs which were simulated; and, conversely, cues were sometimes unnecessarily provided when a JPM was actually performed under dynamic conditions.
- 3) JPM clarity - Several JPMs directed the operator to "verify" or "ensure" that a valve was open. These terms are ambiguous. It wasn't clear whether "verify open" or "ensure open" implied action on the operator's part to open a valve were it in the closed position at the step where he was directed to "verify" or "ensure" it open.

4.0 REQUALIFICATION PROGRAM EVALUATION RESULTS

The facility program for licensed operator requalification training was rated as SATISFACTORY in accordance with the criteria established in ES-601, paragraphs C.2.b.(1)(a-c), and C.2.b.(2)(a-f).

Examination Results

The facility grading was as conservative as the NRC grading on 100% of the pass/fail decisions satisfying the criterion of C.2 b.(1)(a). The NRC staff confirmed that the two individuals failed by the facility (and not NRC staff) were held to more conservative standards than those of the NRC staff.

Fourteen of fifteen operators passed the examination satisfying the criterion of C.2.b(1)(b).

All crews evaluated passed the simulator examination satisfying the criterion of C.2.b.(1)(c).

There was no unsatisfactory crew evaluation so that the criterion C.2.b.(2)(a) is not applicable.

The facility trained and evaluated the operators in all the positions permitted by their individual licenses satisfying criterion C.2.b.(2)(b).

No facility evaluator was determined to be unsatisfactory so that criterion C.2.b.(2)(c) is satisfied.

The facility administrative controls to preclude an RO or SRO who does not possess an active license from performing licensed duties without satisfying the requirements of 10 CFR 55.53 to restore the license to active status was not assessed during this requalification examination.

There were no changes to test items after the examination so that criterion C.2.b.(2)(e) is satisfied.

The facility's failure rate was not excessive compared to the NRC's thus satisfying criterion C.2.b.(2)(f).

5.0 Exit Meeting

An exit meeting was conducted on June 7, 1991. Personnel attending are listed in section 2.0 of this report. The NRC presented partial results of the examinations and discussed the requalification program's strengths and weaknesses.

Attachments:

1. Requalification Test Items
2. Simulator Fidelity Report

ATTACHMENT 1EXAMINATION TEST ITEMSWritten Examination - Part A

Static Examination No. SS-10

<u>Question</u>	<u>RO</u>	<u>SRO</u>
SS-10-01	X	X
-02	X	X
-03	X	X
-04		X
-05	X	X
-06	X	X
-07	X	X
-08		X
-09	X	X
-10	X	X
-11	X	X
-12		X

Static Examination No. SS-16

<u>Question</u>	<u>RO</u>	<u>SRO</u>
SS-16-01	X	X
-02	X	X
-03	X	X
-04	X	X
-05	X	X
-06	X	X
-07	X	X
-08	X	X
-09	X	X
-10	X	X
-11	X	X
-12		X
-13		X

Written Examination Part B

<u>Question</u>	<u>RO</u>	<u>SRO</u>
305H4-90-B-1	X	X
-02	X	X
-03	X	X
-04		X
-05	X	
-06	X	
-07		X
-08		X
-09	X	X
-10	X	X
-11		X
-12	X	X
-13	X	X
-14	X	
-15	X	X
-16	X	
-17	X	X
-18	X	X
-19	X	X
-20	X	
-21	X	
-22	X	
-23	X	X
-24		X
-25	X	
-26	X	X
-27	X	
-28	X	
-29		X
-30	X	X
-31	X	
-32	X	
-33	X	X
-34	X	X
-35		X
-36	X	X
-37		X
-38	X	
-39		X

Job Performance Measures

Manually Start HPCI
Manually Start CS
Reset Recirc R1B
Place RHR in SP Cooling
Reduce Torus Level Using RCIC
Torus Make-up via CS
Alternate RPV Injection from CST
Suppression Chamber M/U Using HPCI
Place SW Pump In-service Locally
Place CHW Loop In-service from RSP
Place Emergency IA Compressor In-service Locally
Start EDG
Manually Start EDG from Remote Panel
Reset RPS Scram
Bypass RSCS
Bypass a Control Rod

Dynamic Simulator Examination

ESG-002
-003
-004
-005
-007
-008
-014
-016
-018
-021

ATTACHMENT 2SIMULATION FACILITY REPORT

Facility Licensee: Public Service Electric and Gas Company
Hope Creek

Facility Docket No: 50-354

Requalification Examination Administered on June 3 - 6, 1991

This form is to be used 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.

During the conduct of the simulator portion of the requalification examinations, no items were observed.