U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Docket No. 50-354

Report No. 50-354/93-14 (OL)

License No. NPF-57

Licensee: Public Service Electric and Gas Company
P.O. Box 236
Hancocks Bridge, New Jersey 08038

Facility: Hope Creek Nuclear Generating Station

Dates: June 23, 1993 and June 30, 1993

Examiners: D. Florek, Senior Operations Engineer
C. Sisco, Operations Engineer

Chief Examiner: D. Florek 7/2/93
D. Florek, Senior Operations Engineer, BWR Section, Operations Branch — Date

Approved By: R J Conte 7/9/93
R. Conte, Chief BWR Section, Operations Branch, Division of Reactor Safety — Date

Examination Summary: Examination conducted June 23 and 30, 1993 (Inspection Report 50-354/93-14 (OL))

Requalification examinations were administered to two senior reactor operators and two reactor operators on one crew. All operators passed the examination. The operators were well prepared for the examination. The examination identified a weaknesses in the procedure for shifting control rod drive flow control valves. One unresolved item was identified related to the Hope Creek requalification training cycle schedule.

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DETAILS

1.0 INTRODUCTION

On June 23 and June 30, 1993, the NRC administered requalification examinations to two senior reactor operators and two reactor operators. The examiners used the process and criteria described in NUREG 1021, "Operator Licensing Examiner Standard," Rev. 7.

An exit meeting was conducted on June 30, 1993. Those present at the exit are listed in Section 6.0.

2.0 EXAMINATION RESULTS

2.1 NRC Requalification Retake 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 crew also passed in the simulator.

2.2 Facility Licensee Requalification Retake 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 crew also passed in the simulator.

2.3 Facility Generic Strengths and Weaknesses Based on Individual Operator Performance on Examinations

The step in job performance measure (JPM) 305H-JPM.BF-001-03, "Shift In-Service CRD Flow Control Valves," to "adjust increase knob on valve B(A) until both controllers indicate the same position" was incorrectly performed by three of the four operators that resulted in the three operators failing the JPM. The examination identified that a weakness in the procedure led to the operator response.

During one of the simulator scenarios, the senior operator was questioned on the emergency operating procedure (EOP) direction for use of high pressure coolant injection (HPCI) during an anticipated transient without scram (ATWS) condition. The operator indicated that HPCI could not be used during an ATWS unless the HPCI line to the core shroud area was isolated. The Operations Manager indicated that the operator's answer was not consistent with the Hope Creek analysis that indicated that HPCI could be used without the core shroud area injection line isolated if HPCI was needed to maintain RPV water level above top of active fuel. The Operations Manager has noted that other crews were also having some confusion on the EOP procedure direction use of HPCI during an ATWS and was pursuing possible procedure changes in this area.

The operators were well prepared for the examinations. Strong teamwork and good communication were evident during the requalification examination simulator scenarios.

3.0 PROGRAM EVALUATION

Because of the limited number of licensed operators examined a program evaluation could not be performed. In accordance with the examiner standards, the NRC staff will defer its program evaluation until NRC staff administers requalification examinations to at least 8 additional licensed operators. However, in inspection report 50-354/93-13 the NRC staff assessed portions of the Hope Creek requalification training program. Notwithstanding the limitations on examination sample size for a program evaluation, the inspection and examination results indicate that the Hope Creek requalification program would remain a satisfactory program.

4.0 EXAMINATION DEVELOPMENT

During the preparation phase of the examination, the examination team made some modifications to the facility licensee proposed examination. For the walkthrough portion of the examination, the examination team created a new JPM to locally adjust recirculation pump speeds and revised some JPM standards to be objective. For the written portion of the examination the examination team revised the written examination and substituted questions and moved the systems type questions to the static portion and the procedure use questions to the classroom portion as described in the examiner standards. As a result of this adjustment to the written examination, the facility licensee classroom written examination bank was noted to be weak in the number of written questions in the emergency planning area. For the simulator portion of the examination the scenario contents were acceptable; however, the standards were revised to be objective in nature. The facility licensee was cooperative in making the adjustments to the examination.

During the validation of the JPM to implement emergency operating procedure HC.OP-EO.ZZ-0321, it was noted that the procedure did not accurately account for electrical tape needed to lift and tape the identified leads. The local emergency operating procedure tool kit did, however, contain the needed tape. The facility licensee representative indicated that they will revise the procedure.

5.0 HOPE CREEK REQUALIFICATION TRAINING CYCLE

The examiner reviewed and discussed the Hope Creek requalification training cycle schedule with the Hope Creek Principal Training Supervisor and reviewed SH.TO-TC.ZZ-0305, "NRC Licensed Operator Requalification Program," dated June 9, 1993. A licensed operator at Hope Creek will get four-two week requalification training segments over the year, with the first segment normally starting in September. Due to the five shift rotation which includes staff licenses, each segment runs 10 weeks. When the segment is completed, another segment immediately starts until the four segments are completed. The end of the fourth segment contains the required examination. For 40 weeks per year (September to June) licensed operators receive formal training and for 12 weeks per year (June to September) no scheduled requalification training is performed. For this year, the fourth

operators receive formal training and for 12 weeks per year (June to September) no scheduled requalification training is performed. For this year, the fourth requalification segment ended on June 17, 1993, and the first segment will start on September 14, 1993.

There are two potential problems with the facility schedule. The first is the length of time between training segments four and one may result in degradation of operator proficiency. Due to the shift rotation, one crew of operators will go 28 weeks between the end of training segment four and the beginning of training segment one. The four other crews will go 18 weeks between training segment four and training segment one. The operator proficiency in the dynamic response in the simulator and keeping abreast of procedure and plant modifications has the potential to be degraded. The second is whether the facility schedule meets the requirements of 10 CFR 55.59(c)(1) "conducted for a continuous period not to exceed two years, and upon conclusion must be promptly followed, pursuant to a continuous schedule, by successive requalification programs." Since one of the segment 4's is the end of the training for the two year cycle, the 12 weeks before the start of segment 1 may not meet the intent of a "promptly followed" or "continuous period" part of the regulations. The facility licensee representative indicated that the NRC staff had reviewed and accepted the Hope Creek training schedule as part of the initial licensing process. Pending additional review by the NRC staff, this item is unresolved. (354/93-14-01)

6.0 PERSONS CONTACTED

Public Service Electric and Gas

*W. Gott, Principal Trainer Hope Creek
*G. Mecchi, Principal Trainer Operations Training
*W. O'Malley, Hope Creek Operations Manager
*A. Orticelle, Manager Operations Training

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*D. Florek, Sr. Operations Manager
*C. Sisco, Operations Engineer

*Denotes those present at the exit meeting on June 30, 1993.

7.0 EXIT MEETING

An exit meeting was conducted on June 30, 1993. Personnel in attendance are listed in Section 6.0. The facility licensee presented their examination results at the exit that indicated that all operators and the crew passed the examination. The NRC presented the examination related findings. The facility representatives acknowledged the NRC findings.

ATTACHMENT 1

SIMULATION FACILITY REPORT

Facility Licensee: Public Service Electric and Gas Company

Facility Docket: 50-354

Operating Tests Administered on: June 30, 1993

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

While conducting the simulator portion of the operating tests, the following items were observed:

ITEM	DESCRIPTION
1.	Simulator interface with the Control Room Integrated Display (CRID) computer was not operational that resulted in rescheduling of the dynamic simulator operating test and static simulator written test from the week of June 21 to June 28, 1993. A cable failure was identified as the cause and successfully repaired.