

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

EXAMINATION REPORT NOS.: 50-272/89-14 (OL)  
50-311/89-13 (OL)

FACILITY DOCKET NOS.: 50-272  
50-311

FACILITY LICENSE NOS.: DPR-70  
DPR-75

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

FACILITY: Salem Generating Station

EXAMINATION DATES: June 20 - 22, 1989

CHIEF EXAMINER:

Edward Yachimiak  
Ed Yachimiak, Operations Engineer

8/23/89  
Date

APPROVED BY:

Peter W. Eiselgroth  
Peter W. Eiselgroth, Chief PWR Section

8/29/89  
Date

SUMMARY: Six (6) Senior Reactor Operator (SRO) examinations were administered. All candidates successfully completed the written and operating portions of their examinations. Six (6) SRO licenses were granted.

### DETAILS

TYPE OF EXAMINATIONS: Replacement

EXAMINATION RESULTS:

|           | SRO<br>Pass/Fail |
|-----------|------------------|
| Written   | 6 / 0            |
| Operating | 6 / 0            |
| Overall   | 6 / 0            |

1. CHIEF EXAMINER AT SITE:

E. Yachimiak (NRC)

2. OTHER EXAMINERS:

D. Wallace (NRC)

K. Faris (PNL)

T. Bardell (PNL)

3. PRE-EXAMINATION REVIEW:

Prior to the administration of the Senior Reactor Operator (SRO) written examinations, two (2) facility representatives, both under security agreement, were invited to review these examinations at our office in King of Prussia, Pennsylvania on June 13, 1989. This review resulted in a content valid, performance based examination.

All simulator scenarios were also reviewed and exercised by the NRC on the Salem Simulator, prior to their use, with the assistance of a facility instructor, also under security agreement.

4. SIMULATOR OPERATION:

During the administration of the operating tests, the simulator operated in a manner which allowed the NRC to satisfactorily evaluate the performance of the applicants.

5. FACILITY REFERENCE MATERIAL:

Reference material was generally adequate and submitted in a timely manner. Some required material specified in the 90-day letter was not sent initially and had to be requested by the examiners. It is recognized that the Requalification Examinations at Hope Creek impacted the resources available to reproduce the materials needed by the NRC to develop the Salem examinations. Future examinations would benefit if more detailed system component information is included with the reference material. Finally, in a few instances, materials were found not to represent current plant operations. For example, control of solid plant pressure was not accurately described in the Operations Systems Description.

6. Application Training Document Review:

During the performance of a post-training document audit of the six (6) license applicants' qualification cards by the Operations Training Manager, some of the cards were found to have some task completion signature blocks unsigned. Because of this anomaly, further review of all the applicants' training records was performed. As a result of this review, some of the applicants were required to completely redo those training tasks for which original completion was not performed, or could not be verified. This training was required to be completed prior to the administration of the NRC written examination on June 20, 1989. After all applicants had completed those missed training tasks, the facility re-submitted new applications.

The facility has undertaken appropriate corrective actions which should, in the future, ensure the timely completion of all training tasks prior to the submission of license applications to the NRC. These actions include a formalized set of instructions for both applicants and training instructors on the mechanism for completion of all qualification card training tasks. This guidance will ensure that both applicants and training department personnel have verified training completion prior to the submittal of NRC license applications. In addition, the qualification cards will be simplified and reorganized to provide applicants a more "user-friendly" checklist of training tasks which are to be completed during the training process. Lastly, the training department will provide more "in-plant" instructors who will be solely responsible for qualification card task completion and sign-offs. These corrective actions will be reviewed by the NRC to verify implementation by the facility.

7. EXIT MEETING :

With the personnel listed below in attendance, the items in sections 5 and 6 above were presented and discussed on June 23, 1989.

NRC Personnel

S. Johnson, Senior Operations Specialist (INEL)  
D. Wallace, Operations Engineer  
E. Yachimiak, Operations Engineer

Facility Personnel

J. Gueller, Operations Manager  
D. Hanson, Manager Nuclear Training  
J. Lloyd, PTS Salem Operations  
G. Mecchi, PT Operations Training  
K. Moore, NTS Salem Simulator  
B. Preston, Manager Licensing & Regulation

Attachment: SRO Master Written Examination and Answer Key