

U.S. NUCLEAR REGULATORY COMMISSION
REGION III

Region No. 50-461/OL-90-02

Docket No. 50-461

Licensee No. NPF-62

Licensee: Illinois Power Company
500 South 27th Street
Decatur, IL 62525

Facility Name: Clinton 1 Power Station.

Examination Administered at: Clinton 1 Power Station,
Clinton, Illinois

Examinations Conducted: January 22-23, 1990.

Chief Examiner: G. M. Nejeff
G. M. Nejeff

02-01-90
Date

Approved by: M. J. Jordan
M. J. Jordan

2/1/90
Date

Examination Summary

Examination administered on January 22-23, 1990 (Report No. 50-461/OL-90-02):
Three Senior Reactor Operators (SROs) were administered retake written examinations; and one SRO and one Reactor Operator (RO) were administered retake operational examination (i.e., Job Performance Measures (JPMs)).
Results: All the operators passed the retake examinations. The parallel grading between the facility and NRC of examination results were within the guidance provided by NUREG-1021, ES-601.

Significant Strengths:

- Training Staff applied the "lessons learned" from the September 1989 Requalification Examination (See Examination Report 50-461/OL-89-01).
- Examination development by licensee identified several procedural problems (See Paragraph 2.b of this report for details).

Significant Weaknesses:

- None Noted.

REPORT DETAILS

1. Examiner

G. M. Nejfelt, Chief Examiner, USNRC, Region III

2. Exit Meeting

An exit meeting was conducted on January 23, 1990, at the Clinton Nuclear Power Station.

Illinois Power Company Representatives

J. S. Perry, Vice President, Nuclear
J. G. Cook, Manager, Clinton Power Station
R. E. Wyatt, Manager, Nuclear Training Department (NTD)
J. A. Miller, Manager, Scheduling & Outage Management (SOM)
A. L. Ruwe, Director, Nuclear Station Engineering (NSED)
D. L. Holtzscher, Acting Manager, Licensing & Safety (L&S)
J. D. Weaver, Director, L&S
K. R. Graf, Director, Operations Monitoring, Quality Assurance (QA)
D. M. Antonelli, Director, Operator Training, NTD
M. W. Lyon, Supervisor, Requalification & Operator Training, NTD
P. D. Yocum, Supervisor, Plant Operations (OPS)
W. S. Iliff, Supervisor, Licensing Administration, L&S
J. R. Hays, Senior Training Instructor, NTD
T. M. Weldzius, Technical Advisor, Nuclear Program Assessment Group (NPAG)

Soyland Representative

J. Greenwood, Manager Power Supply, Site Representative

NRC Representative

G. M. Nejfelt, Chief Examiner, Region III, USNRC

The following items were discussed during the exit:

- a. The material prepared by the licensee for this retake of the NRC September 1985 Requalification Examination was excellent. The written examination questions for both the static simulator (Part A) and open reference (Part B) portions were unambiguously written in a multiply choice format; and required the operator to analyze the information provided. Also, the operating examination portion used Job Performance Measures (JPMs) of significant importance (i.e., Emergency Reactor Pressure Vessel Depressurization, JPM-EPE-49, Revision 2) with relevant followup questions.

- b. During the development of this examination, the Training Department identified several procedural difficulties. This was the natural consequence of thoroughly considering the sources of information to prepare technically correct examination questions. Your Training Staff is commended for the critical review performed of the examination materials provided. Several specific procedural items identified by your Training Staff were:

(1). Human Factor Type Items:

- (a). Design numbers were used rather than values that can be read with the accuracy of the instrumentation used by the operator. For example,
- ° KW Meter for loading a diesel generator required a minimum load of 3,869 KW, although the smallest meter increment is 200 KW (CPS No. 3506.01, Rev. 13, Step 8.1.4.5); and
 - ° Low Pressure Core Spray (LPCS) flow rate is expected to be controlled between 5,010 to 5,151 gpm, although the smallest meter increment is 200 gpm (CPS No. 3313.01, Rev. 5, Step 8.3).
- (b) Positioning of transfer switches on the Remote Shutdown Panel (RSP) to place Residual Heat Removal (RHR) into Alternate Shutdown Cooling (CPS No. 4003.01, Rev. 6, Step 8.3.6.5) required the operator to determine the correct table to reposition the RSP transfer switches. The actual implementation to initially reposition the needed transfer switches was found to be both protracted and confusing method. A solution proposed by a Senior Training Department Instructor was to verify that power was available to the component to be operated (i.e., pump, valve, etc.) using the color coded geometric shapes associated with each RSP active component and its RSP transfer switch (i.e., red square, blue hexagon, etc.) immediately prior to operating the component. This comment was applicable to other evolutions performed from the RSP.

- (2). Identified the omission of flow criteria for RHR Service Water to be maintained by the operator (CPS No. 3211.01, Rev. 11; and CPS No. 3312.01, Rev. 15).

- (3). Identified erroneous procedural value of 120 VAC that was to be verified for the Uninterruptible Power Supply (UPS) Alternate AC Power Supply Voltage, which is typically 520 VAC (CPS No. 3509.01, Rev. 6, Step 8.1.3).
- c. The operator, who was retested for the JPMs because of procedural non-compliance, showed a marked improvement in his careful use of procedures compared to the testing performed in September 1989. Furthermore, this operator identified a nomenclature error while doing JPM-RH-35, Revision 2, Service Water Injection into the Reactor Vessel in CPS No. 3322.01, Rev. 15, Step 8.3.3.4.b. This procedure called the "RHR B HX [Heat Exchanger] SSW [Service Water] Inlet Valve" the "1E12-F014A" rather than the "1E12-F014B" Valve. The remedial training provided by the Training Department proved to be effective.
- d. Plant cleanliness was noted by the Examiner to be good. Equipment used for work was picked at the end of the workday (i.e., removal of tools and trash located at the entrance to containment).
- e. A safety hazard was observed on January 22, 1990, removing several 55 gallon (gal) drums via the Lower Containment Personnel Airlock. These drums were not adequately secured to the dolly; and no ramps were used for the dolly. One drum was barely kept on the dolly by a workman, who quickly pushed a drum back onto the dolly carriage, after the dolly was pulled and dropped approximately 7 vertical inches between the containment door base and the secondary containment deck. Also, one drum cover was jarred loose negotiating this vertical drop and resulted in approximately 0.5 gallons of liquid in the drum to be spilled in the secondary containment. The spill was inconsequential, because the liquid was flush water from the surveillance for the Standby Liquid Control System (SLC) with an estimate concentration of sodium pentaborate less than 2 parts per million (ppm).
- f. The Examiner expressed a concern that procedural changes were not being incorporated within a reasonably expeditious manner, since the procedural discrepancy noted for the UPS Alternate Power Supply (See Paragraph 2.b(3)) was not scheduled to be revised. Mr. Perry, Vice President of Nuclear, agreed that there was indeed a problem with the backlog of items to be incorporated into procedures; and that there was a significant effort to correct this problem. This concern will be monitored by the Resident Inspector Office.

3. Examination Results Comparison

The written examination results between the facility and the NRC were identical, because the entire written examination consisted of multiple choice questions. Also, the comparison for the operating examination between the facility and NRC evaluations was consistent.

4. Overall Requalification Program Evaluation

The requalification program was assigned an overall program rating of satisfactory based upon the September 1989 NRC Requalification Examination (See Examination Report: 50-461/OL-89-01).

Facility: Clinton 1 Power Station

Chief Examiner: G. M. Nejfelt

Dates of Evaluation: January 22-23, 1990

Areas Evaluated: Written and Oral

Examination Results*:

	<u>RO</u> <u>Pass/Fail</u>	<u>SRO</u> <u>Pass/Fail</u>	<u>Total</u> <u>Pass/Fail</u>	<u>Evaluation</u> <u>(S, M, or U)</u>
Written Examination	0/0	3/0	3/0	S
Operating Examination				
Oral	1/0	1/0	2/0	S
Simulator				Not Applicable

*This NRC Requalification Examination was the re-examination of operators, who either failed or did not complete the September 1989 NRC Requalification Examination.

Written Examination Grading: The facility grading identically matched the NRC grading, since grading the entire examination was in a multiple choice format.

Crew Examination Results:

Crew evaluation was not applicable for this particular re-examination.

Overall Program Evaluation:

Satisfactory.

RIII
gn
Neffelt/cg
2/1/90

RIII
mlj
Jordan
2/1/90

RIII
hw
Wright
2/1/90