



Illinois Power Company
Clinton Power Station
P.O. Box 678
Clinton, IL 61727
Tel 217 935-5623
Fax 217 935-4632

John G. Cook
Vice President

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2C.220
JGC-256-94
September 2, 1994
10CFR50.73

Docket No. 50-461

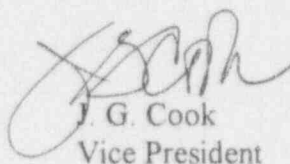
Document Control Desk
Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Clinton Power Station - Unit 1
Licensee Event Report No. 94-007-00

Dear Sir:

Enclosed is Licensee Event Report No. 94-007-00: Inattention to Detail During Preparation for Plant Startup Results in Failure to Complete Intermediate Range Monitor Detector Not-Full-In Control Rod Block Functional Test Prior to Entering the Startup Mode. This report is being submitted in accordance with the requirements of 10CFR50.73.

Sincerely yours,



J. G. Cook
Vice President

RSF/csm

Enclosure

cc: NRC Clinton Licensing Project Manager
NRC Resident Office, V-690
Regional Administrator, Region III, USNRC
Illinois Department of Nuclear Safety
INPO Records Center

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LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS
INFORMATION COLLECTION REQUEST: 50.0 HRS.
FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE
INFORMATION AND RECORDS MANAGEMENT BRANCH (MNSB
7714), U.S. NUCLEAR REGULATORY COMMISSION,
WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK
REDUCTION PROJECT (3150-0104), OFFICE OF
MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Clinton Power Station

DOCKET NUMBER (2)

05000461

PAGE (3)

1 OF 4

TITLE (4) Inattention to Detail During Preparation for Plant Startup Results in Failure to Complete Intermediate Range Monitor Detector Not-Full-In Control Rod
Block Functional Test Prior to Entering the Startup Mode

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
08	08	94	94	007	00	09	02	94	None	05000
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
2			20.402(b)			20.405(c)			50.73(a)(2)(iv)	
POWER LEVEL (10)			20.405(a)(1)(i)			50.36(c)(1)			50.73(a)(2)(v)	
000			20.405(a)(1)(ii)			50.36(c)(2)			50.73(a)(2)(vii)	
			20.405(a)(1)(iii)			X 50.73(a)(2)(i)			50.73(a)(2)(viii)(A)	
			20.405(a)(1)(iv)			50.73(a)(2)(ii)			50.73(a)(2)(viii)(B)	
			20.405(a)(1)(v)			50.73(a)(2)(iii)			50.73(a)(2)(x)	

(Specify in Abstract
below and in Text,
NRC Form 366A)

LICENSEE CONTACT FOR THIS LER (12)

NAME

A. K. Beecher, Project Operations Specialist

TELEPHONE NUMBER (Include Area Code)

(217) 935-8881, Extension 3373

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES

(If yes, complete EXPECTED SUBMISSION DATE).

X

NO

EXPECTED
SUBMISSION
DATE (15)

MONTH

DAY

YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On August 8, 1994, a channel functional test of the intermediate range monitor (IRM) detector-not-full-in control rod block function was not completed as required prior to plant entry into Mode 2 (STARTUP). The cause of the event is attributed to a lack of attention to detail by the staff assistant shift supervisor (SASS). While completing the checklist of prerequisites for entry into Mode 2, the SASS noticed that a portion of a surveillance test procedure had not been performed but did not recognize that the portion was required to be completed prior to entry into Mode 2. The SASS then incorrectly initialed the checklist to indicate the test was current. The approach-to-critical integrated procedure contributed to the cause of this event because it did not contain a prerequisite to remind personnel that the test must be performed within seven days prior to plant startup. Corrective actions include the shift supervisor discussing the event with the SASS and emphasizing attention to detail, revising the approach to critical integrated procedure to include a prerequisite to verify the test is current prior to plant startup, and providing information about this event to Operations personnel.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Clinton Power Station	05000461	94	007	00	2 OF 4

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

DESCRIPTION OF EVENT

On August 4, 1994, at about 2233 hours, the plant entered Mode 3 (HOT SHUTDOWN) from Mode 1 (POWER OPERATION) to start a planned maintenance outage (MO-5). Entering Mode 3 initiates a requirement to perform channel functional testing of intermediate range monitors (IRM) [MON] [IG] for the reactor protection system [JC] neutron flux-high and inoperative functions in accordance with the applicable portions of surveillance CPS 9031.14, "IRM Channel Functional."

At about 0810 hours on August 5, 1994, operators completed all portions of surveillance CPS 9031.14 applicable to Mode 3. Section 8.3 of the surveillance was not required for Mode 3 and was therefore not completed. Section 8.3 of the surveillance satisfies the surveillance requirement of Technical Specification Table 4.3.6-1, item 4.a which requires performance of a channel functional test of the IRM detector-not-full-in control rod block function at least once per seven days when the plant is in Mode 2 (STARTUP) and Mode 5 (REFUELING).

At about 1226 hours, the plant entered Mode 4 (COLD SHUTDOWN).

At about 1420 hours, the Mode 2 Checklist, a list of prerequisites for plant entry into Mode 2, was initiated to begin tracking surveillances required to be completed prior to plant entry into Mode 2.

At about 2200 hours, the staff assistant shift supervisor (SASS) reviewed the CPS 9031.14 surveillance report and signed the Mode 2 Checklist indicating that the surveillance was current. The SASS noticed that section 8.3 was not performed but did not recognize that section 8.3 was required to be complete prior to plant entry into Mode 2.

At about 0249 hours on August 8, 1994, the plant entered Mode 2 when operators placed the reactor mode switch [HS] in the startup/hot standby position to begin plant startup. The reactor [RCT] coolant temperature was about 170 degrees Fahrenheit and pressure was zero pounds per square inch.

At about 1415 hours, during a routine review of surveillance test packages, the surveillance coordinator identified that section 8.3 of surveillance test CPS 9031.14 had not been completed as required prior to plant entry into Mode 2. The surveillance coordinator immediately notified the SS that the surveillance test had not been completed, and the SS declared all IRMs inoperable. Condition report 1-94-08-020 was initiated to track a root cause investigation and corrective action determination.

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

By 1443 hours, operators completed section 8.3 of surveillance test CPS 9031.14 on IRM channels A, B, D, E, F, and H with satisfactory results and those channels were declared operable.

The reactor mode switch was placed in the run position at about 1805 hours, and the plant thus entered Mode 1. By design, the IRM detector-not-full-in function is bypassed when the reactor mode switch is in the run position.

No automatic or manually initiated safety system responses were necessary to place the plant in a safe and stable condition. No other equipment or components were inoperable at the start of this event to the extent that their inoperable condition contributed to this event.

CAUSE OF EVENT

The cause of this event is attributed to a lack of attention to detail by the SASS. While working through the Mode 2 checklist prior to plant startup, the SASS, a licensed senior reactor operator, reviewed the most recent CPS 9031.14 surveillance test report and noted that section 8.3 had not been completed, but did not recognize that the section was required to be complete prior to entry into Mode 2. The SASS then incorrectly initialed the Mode 2 checklist to indicate that surveillance test CPS 9031.14 was current.

The investigation of this event concluded that integrated procedure CPS 3001.01, "Approach to Critical," contributed to the cause of this event. The procedure contains prerequisites that remind personnel that functional tests of average power range monitors and source range monitors must be performed within seven days prior to plant startup, but contains no such reminder for functional testing of IRMs.

CORRECTIVE ACTION

The SS discussed this event with the SASS and emphasized that greater attention to detail in investigating the requirements for performing Section 8.3 of surveillance test CPS 9031.14 would have prevented this event.

Integrated procedure CPS 3001.01 will be revised to include a prerequisite step requiring verification that surveillance test CPS 9031.14 is current prior to plant startup. The step will note that section 8.3 of CPS 9031.14 is required prior to plant entry into Mode 2.

A copy of condition report 1-94-08-020 has been attached to the Operations Night Orders to provide an opportunity for Operations personnel to review this event and the corrective actions taken in response to it.

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

ANALYSIS OF EVENT

This event is reportable under the provisions of 10CFR50.73(a)(2)(i)(B) because of the failure to demonstrate that the IRM detector-not-full-in control rod block function was operable prior to the plant entry into Mode 2 as required by the Technical Specifications.

Assessment of the safety consequences and implications of this event concluded that this event was not nuclear safety significant. The operability of the IRM detector-not-full-in control rod block function was not demonstrated prior to plant entry into Mode 2. However, the performance of the surveillance test about 12 hours after entry into Mode 2 demonstrated that the control rod block circuitry was capable of performing its function of detecting IRM detectors not fully inserted and preventing control rod withdrawal. This event would not have adversely affected the IRM detector-not-full-in control rod block function of assuring that no control rod is withdrawn during low neutron flux level operations unless proper neutron monitoring capability is available such that all IRM detectors are correctly positioned.

Section 8.3 of surveillance test CPS 9031.14 was not completed prior to plant entry into Mode 2 at about 0249 hours on August 8, 1994. The failure to complete the surveillance was discovered at about 1415 hours on August 8, 1994, and the surveillance test was completed with satisfactory results by about 1443 hours on August 8, 1994.

ADDITIONAL INFORMATION

No equipment or component failed as a result of this event.

Clinton Power Station has not reported similar events in recent history.

For further information regarding this event, contact A. K. Beecher, Project Operations Specialist, at (217) 935-8881, extension 3373.