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Power Company
Cook Nuclear Plant
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Bridgman, MI 49106
616-465-6901



January 08, 2001

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Operating Licenses DPR-58 and DPR-74
Docket Nos. 50-315 and 50-316

Document Control Manager:

In accordance with the criteria established by 10 CFR 50.73 entitled Licensee Event Report System, the following report is being submitted:

LER 315/2000-009-00: "Failure to Perform Technical Specification Valve Position Surveillance on Leak-off Valves"

No commitments were identified in this submittal.

Sincerely,

A handwritten signature in black ink that reads "Joseph E. Pollock". The signature is written in a cursive style with a large initial "J".

Joseph E. Pollock
Plant Manager

/bwo
Attachment

c: J. E. Dyer, Region III
L. Brandon
B. A. McIntyre
T. P. Noonan
A. C. Bakken III
R. P. Powers
R. Whale
NRC Resident Inspector
Records Center, INPO

IER2

LICENSEE EVENT REPORT (LER)

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

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-8 F33), 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) Donald C. Cook Nuclear Plant Unit 1	DOCKET NUMBER (2) 05000-315	PAGE (3) 1 of 3
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TITLE (4)
Failure to Perform Technical Specification Valve Position Surveillance on Leak-off Valves

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	
12	06	2000	2000	-- 009 --	00	01	08	2001	FACILITY NAME	DOCKET NUMBER	
OPERATING MODE (9)		5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
POWER LEVEL (10)		---	20.2201 (b)			20.2203(a)(2)(v)			X	50.73(a)(2)(i)	50.73(a)(2)(viii)
			20.2203(a)(1)			20.2203(a)(3)(i)				50.73(a)(2)(ii)	50.73(a)(2)(x)
			20.2203(a)(2)(i)			20.2203(a)(3)(ii)				50.73(a)(2)(iii)	73.71
			20.2203(a)(2)(ii)			20.2203(a)(4)				50.73(a)(2)(iv)	OTHER
			20.2203(a)(2)(iii)			50.36(c)(1)				50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A
			20.2203(a)(2)(iv)			50.36(c)(2)				50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Brenda W. O'Rourke, Compliance Engineer	TELEPHONE NUMBER (Include Area Code) 616 / 465-5901, x2604
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
YES (If Yes, complete EXPECTED SUBMISSION DATE).	X	NO						

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

On December 6, 2000, during performance of the procedure used to satisfy Technical Specifications (TS) containment integrity surveillance requirement (SR) 4.6.1.1.a.1, it was determined that a missed TS surveillance had previously occurred. It was determined that, prior to the 1997 extended shutdown, the surveillance procedure failed to include position verification for two Emergency Core Cooling System test connection isolation valves. The two residual heat removal (RHR) system test connection valves, 1-RH-110E and 1-RH-110W, are the stem leak-off isolation valves for the normally closed containment recirculation sump isolation valves. These test connection valves provide a boundary to maintain containment integrity during operating modes 1 (Operation) through 4 (Hot Shutdown), and are required to be verified in their correct positions at least once every thirty-one days. Failure to verify the position of these test connection valves since their installation is a violation of TS. As such, this LER is being submitted in accordance with 10 CFR 50.73(a)(2)(i)(B) for a condition prohibited by TS.

The apparent cause for this condition was the failure to adequately control plant modifications and supporting documentation. The Unit 2 containment recirculation sump isolation valves were verified to not have leak-off valves. The extent of condition is limited to this containment penetration due to it's unique configuration. This condition is not applicable to Unit 2.

The leak-off valves had been verified to be in their correct positions prior to each plant startup; access to these leak-off valves is very limited during normal plant operation; the leak-off piping is capped; and, the valve enclosure tanks are closed and monitored for leakage. Based on the above, the safety significance of the condition is minimal.

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

Conditions Prior to Event

Unit 1 was in Mode 5, Cold Shutdown.

Description of Event

On December 6, 2000, during performance of the procedure used to satisfy Technical Specifications (TS) containment integrity surveillance requirement (SR) 4.6.1.1.a.1, it was determined that a missed TS surveillance had previously occurred. It was determined that, prior to the 1997 extended shutdown, the surveillance procedure failed to include position verification for two Emergency Core Cooling System test connection isolation valves. The two residual heat removal (RHR) system test connection valves, 1-RH-110E and 1-RH-110W, are the stem leak-off isolation valves for the normally closed containment recirculation sump isolation valves. These test connection valves provide a boundary isolation to maintain containment integrity during operating modes 1 (Operation) through 4 (Hot Shutdown), and are required to be verified in their correct positions at least once every thirty-one days. The valves are located in tank enclosures outside containment, and are not readily accessible in operating modes 1-4. Although the TS allows inaccessible valves to be checked only during cold shutdown conditions instead of every thirty-one days, that allowance only applies to equipment located in containment. Failure to verify the position of these test connection valves since their installation is a violation of TS. As such, this LER is being submitted in accordance with 10 CFR 50.73(a)(2)(i)(B) for a condition prohibited by TS.

Cause of Event

The apparent cause for this condition was the failure to adequately control plant modifications and supporting documentation, such as plant drawings and related procedures. Specifically, a 1977 plant modification, performed to remove the stem leak-off isolation valves, was closed without verifying the Unit 1 leak-off valves were removed from the plant. The Unit 2 valves were removed by this modification. Additionally, plant drawings updated following the modification did not show the valves in Unit 1.

During the extended shutdown in 1997-2000, several evaluations of penetrations and the tank enclosures were conducted. These valves were added to the procedures in 2000 prior to Unit 1 ascension into mode 4. It was not realized at the time that past reportability should have been evaluated.

These issues are symptoms of the larger generic issue of inadequate design basis control that had been previously identified and confirmed during the Expanded System Readiness Reviews.

Analysis of Event

The containment recirculation sump isolation valves are eighteen-inch double-disk gate valves, and are located inside enclosure tanks that are normally closed during normal plant operation. The stem leak-off isolation valves are one-inch globe valves, also located inside the enclosure tanks. The leak-off valves were installed prior to initial plant startup on equalizing lines to prevent pressure locking and thermal binding of the recirculation sump isolation valves. Later it was determined that the equalizing lines were not needed in this application, and were supposed to be removed. The equalizing line was cut and capped, but the leak-off valves were left in place.

Standard plant practice has been to verify the position of all safety system valves prior to plant startup. Over the years, the leak-off valves had been verified to be in their correct positions during the RHR system alignment procedure, performed prior to each plant startup. Access to these leak-off valves is very limited during normal plant operation because the valve enclosure tanks remain closed. Additionally, the leak-off piping is capped, and the valve enclosure tanks are monitored for leakage by level alarm switches. Checking the valve position only prior to startup meets the intent of the TS surveillance, since valves in limited access areas, i.e., containment, may be exempted from the thirty-one day surveillance. However, these two leak-off valves are not in the containment, but are located in a sealed enclosure outside containment, and the

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

surveillance must be performed. Based on the above, the safety significance of the failure to perform the thirty-one day TS surveillance on these two leak-off valves is minimal.

Corrective Actions

No immediate corrective actions were necessary because the current procedure in use had the proper valves included. This issue is related to past surveillances only.

The Unit 2 containment recirculation sump isolation valves were verified to not have leak-off valves.

The extent of condition is limited to this containment penetration due to it's unique configuration. This condition is not applicable to Unit 2.

The corrective actions to prevent recurrence for the root cause of the generic inadequacies of the design control process are being addressed through the Donald C. Cook Nuclear Plant Corrective Action Program. The root cause evaluation identified numerous corrective actions to address management, organizational, and programmatic issues in the Engineering organization. Actions specific to restart of the CNP units have been tracked and completed as part of the CNP Restart Plan.

Previous Similar Events

There have been numerous LERs from 1999 and 2000 that have been linked to the design control inadequacies root cause. Since the condition described here is historical, the corrective actions from these LERs would not have identified or prevented this condition.