

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-6 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)

Cook Nuclear Plant Unit 2

DOCKET NUMBER (2)

05000-316

PAGE (3)

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TITLE (4)

Requirements of Technical Specification 4.0.5 Not Met Due to Improperly Performed Test

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	
04	15	1996	1999	--	002	--	00	05	10	1999	
OPERATING MODE (9)		6	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
POWER LEVEL (10)		00	20.2201 (b)		20.2203(a)(2)(v)		<input checked="" type="checkbox"/> 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 on NRC Form 366A		
			20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)				

LICENSEE CONTACT FOR THIS LER (12)

NAME

Ms. M. B. Depuydt, Compliance Engineer

TELEPHONE NUMBER (Include Area Code)

616/465-5901, x1589

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)

YES

(If Yes, complete EXPECTED SUBMISSION DATE).

☒

NO

EXPECTED
SUBMISSION
DATE (15)

MONTH

DAY

YEAR

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

On April 15, 1996, with Unit 2 in Mode 6, the containment sump pump discharge piping at containment penetration 2-CPN-41 was pressurized for approximately one minute to perform an Inservice Inspection (ISI) system functional pressure test. ASME Code, Section XI required the line to be pressurized for at least ten minutes for the test. At the time, the one-minute test was considered an acceptable alternative to the ten-minute test. On April 9, 1999, this was identified as an incorrect test method, which did not meet the requirements of the surveillance. Since the requirements of Technical Specification 4.0.5 were not met, this event is reportable under 10 CFR 50.73(a)(2)(i)(B), as an operation prohibited by the plant's Technical Specifications.

The apparent cause of the event was an incorrect interpretation of the ASME Code. No immediate corrective actions were required as the unit is currently in Mode 5 and containment integrity is not required. The Appendix J testing for the penetration piping will be completed prior to restart of the unit. Procedures are being revised to strengthen the ISI program and the interface with the program coordinator. Based on the satisfactory results of Appendix J testing performed on the same penetration and a work history of no leakage, it has been determined that there is no safety significance associated with the incorrectly performed test.

The root cause investigation for this event has not been completed. If significant changes to the LER are needed as a result of the completion of the investigation, a supplemental report to this LER will be submitted.

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PDR ADDCK 05000316
S PDR

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

Conditions Prior to Event

Unit 2 was in Mode 6, Refueling

Description of Event

On April 15, 1996, during the second Inservice Inspection (ISI) interval, the containment sump pump discharge piping at containment penetration 2-CPN-41 was pressurized, using the sump pump, for approximately one minute to perform an ISI system functional pressure test. The 1983 ASME Section XI, Article IWA-5213(b), "Test Condition Holding Time", required the piping to be pressurized for at least ten minutes. The test personnel considered the one-minute test an acceptable equivalent to the ten-minute test. It was desirable to shorten the test time because the sump does not hold enough water to keep the sump pump running for 10 minutes without being refilled.

This condition was identified as a result of a self-assessment of the ISI pressure test program that was initiated in November 1998. The assessment was conducted to determine the adequacy of the ISI Program. During the assessment the acceptability of the shorter hold time was questioned, and it was subsequently determined that it was not acceptable to decrease the hold time to 1 minute. The self-assessment identified a number of minor issues, however, the pressure test of the 2-CPN-41 piping was the only test or examination identified that did not meet the Code requirements.

Cause of Event

The apparent cause of the event was an incorrect interpretation of the ASME Code. Test personnel believed the test acceptable because of a note in the Job Order which stated "10 minute hold time not required per ANII (Authorized Nuclear Inservice Inspector) since pump cannot be run for that length of time". This was apparently based on an incorrect interpretation of Article IWA-2240, "Alternative Examinations", of the 1983 Edition of Section XI with Addenda through Summer 1983. Test personnel believed the test was acceptable based on the ANII's sign off of the test and the incorrect interpretation.

Analysis of Event

This event is reportable under 10 CFR 50.73(a)(2)(i)(B), as operation prohibited by the plant's Technical Specifications. The requirements of Technical Specification 4.0.5, Surveillance Requirements for Inservice Inspection and Testing of ASME Code Class 1, 2 and 3 components were not met.

This specification ensures that Inservice Inspection of ASME Code class 1, 2 and 3 components and Inservice Testing of ASME Code Class 1, 2, and 3 pumps and valves will be performed in accordance with a periodically updated version of Section XI for the ASME Boiler and Pressure Vessel Code and Addenda as required by 10CFR50.55a.

During the second Inservice Inspection interval a system functional test was performed on containment penetration 2-CPN-41. This test did not meet the Code requirements for pressure hold time, but was declared to be acceptable based on an incorrect interpretation of Code requirements. A review of the testing performed on this penetration for both the first and second intervals revealed that all other testing, hydrostatic, Appendix J - B & C, and ILRT, had acceptable results. These tests were all performed in accordance with the requirements.

Since Appendix J test results from earlier in the same Inservice Inspection interval verified that the penetration was acceptable, and the penetration does not have a history of work requests that would indicate leakage problems, it has been determined that there is no safety significance associated with the test that was performed incorrectly.

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

Corrective Actions

No immediate corrective actions were necessary since the unit is currently in Mode 5 and containment integrity is not required.

A relief request to apply Code Case N-522 for system pressure testing of Class 2 components at containment penetrations was submitted to the NRC in November 1996 to request approval for the Appendix J alternative method of testing. This request was approved in July 1997 for use during the third ISI interval and will be applied to 2-CPN-41, which will be tested prior to restart of the unit. The relief granted allows testing in accordance with Appendix J as long as the maximum pressure that will be seen during an accident is used. This is being incorporated into the overall ISI Program, as well as the appropriate procedures.

12 QHP 5070 NDE.002, "Visual VT-2 Examinations: Inservice and Repair/Replacements", will be revised to require consultation with the ISI Program Coordinator when problems are encountered with a test, and to delete any references to interface with the ANII. The ISI Program Coordinator will consult with the ANII when appropriate.

The expectations for the interface with the ANII has been added to procedure PMP-5070, "Inservice Inspection Program Implementation", which is being drafted. This procedure will also contain detail on how the ISI Program requirements will be administered, provide information on requesting relief, and specify who can grant relief.

A formal meeting to thoroughly discuss Section XI, IWA-2240 has been held with personnel involved with the ISI program. The ANII also attended the meeting. This meeting provided information as to when relief requests are to be written to deviate from Code requirements and when exemptions from regulatory requirements are required.

Job Orders (JOs) associated with ISI testing, that have already been written, will be reviewed to determine if other JOs contain notes which could lead to the misinterpretation of Code requirements. This review will be performed for both units, and any notes found will be dispositioned appropriately by the ISI program coordinator.

The root cause investigation for this event has not been completed. If significant changes to the LER are identified as a result of the completion of the investigation, a supplemental report to this LER will be submitted.

Previous Similar Events

None