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September 8, 2000

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

Operating License DPR-74
Docket No. 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 316/2000-012-00, "Failure to Perform Increased Frequency Surveillance on 2 East Containment Spray Pump".

No commitments were identified in this submittal.

Should you have any questions regarding this correspondence, please contact Mr. Wayne J. Kropp, Director Regulatory Affairs, at 616/697-5056.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Christopher Bakken, III'. The signature is stylized and includes a large circular flourish at the end.

A. Christopher Bakken, III
Site Vice President

/mbd
Attachment

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

Handwritten initials 'JED' in black ink, located in the bottom right corner of the page.

NRC Form 366 (6-1998)	U.S. NUCLEAR REGULATORY COMMISSION LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)	APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001 <small>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</small>
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FACILITY NAME (1) Donald C. Cook Nuclear Plant Unit 2	DOCKET NUMBER (2) 05000-316	PAGE (3) 1 of 3
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TITLE (4)

Failure to Perform Increased Frequency Surveillance on 2 East Containment Spray Pump

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	11	2000	2000	--	012	--	00	09	08	2000	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)										
POWER LEVEL (10)	100	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 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 M. B. Depuydt, Regulatory Affairs	TELEPHONE NUMBER (Include Area Code) 616 / 465-5901, x1589
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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	X	NO							
(If Yes, complete EXPECTED SUBMISSION DATE).									

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

On August 11, 2000, it was determined that the required surveillance frequency for the Unit 2 East Containment Spray (CTS) pump had not been met. Vibration results in the "Alert" range from the previous performance of 2 East CTS pump surveillance in June 2000 required an increased surveillance frequency. The next surveillance should have been performed no later than July 20, 2000, but was not performed until August 11, 2000. This condition is a violation of Technical Specification (TS) 4.0.5, and is reportable in accordance with 10CFR50.73(a)(2)(i)(B), for a condition prohibited by TS.

The cause of the missed surveillance was human error, as the Inservice Testing (IST) engineer responsible for review of the surveillance completed in June did not identify that the 2 East CTS pump vibration was in the Alert range and required an increased surveillance frequency. Appropriate disciplinary action was taken in accordance with plant policy. The 2 East CTS pump was tested and determined to be operable on August 11, 2000, with vibration in the Alert range. The IST program procedure, EHI-5071 "Inservice Testing Program Implementation," was reviewed and determined to provide clear instruction regarding actions to be taken when test results fall in the Alert range. Procedural enhancements will be made to Plant Manager Procedure PMP-4030.EXE.001, "Conduct of Surveillance Testing," and Operations procedure OHI-4016, "Conduct of Operations Guidelines," to provide additional barriers to recurrence.

The failure to test on an increased frequency was evaluated for safety significance. It was determined that the event was of minimal safety significance, as the 2 East CTS pump is operable.

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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 1, Power Operations, at 100 percent Rated Thermal Power

Description of Event

On August 11, 2000, the Unit 2 East Containment Spray (CTS) pump quarterly operability surveillance test was performed. The pump vibration test results fell in the Inservice Testing (IST) program "Alert " range. Post surveillance review of the previous test results, performed on June 4, 2000, revealed that the vibration results were also in the Alert range in June. Vibration results in the Alert range should have resulted in the operability surveillance being performed on an increased frequency, no later than July 20, 2000. The required testing was not performed until August 11, 2000.

Failure to perform the surveillance testing on an increased frequency is a violation of Technical Specification (TS) 4.0.5. This LER is submitted in accordance with 10CFR50.73(a)(2)(i)(B), for a condition prohibited by TS.

Cause of Event

The cause of the missed surveillance was human error. The Inservice Testing (IST) Program engineer responsible for review of the surveillance completed on June 4, 2000, did not identify that the 2 East CTS pump vibration was in the Alert range and required an increased surveillance frequency.

Analysis of Event

The CTS provides spray cooling water to the containment atmosphere in order to prevent containment pressure from exceeding its design value following a Loss of Coolant Accident (LOCA) or a rupture of a steam line inside containment. Additionally, CTS is designed to remove radioactive iodine isotopes from the containment atmosphere during a LOCA.

Testing of the CTS pumps under the IST program is required in accordance with TS 4.0.5, and performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code. Acceptance criteria for mechanical parameters such as vibration are established in accordance with ASME/ANSI OMa-1988, Part 6. The "Action Ranges" are defined by the acceptance criteria and indicate consequent courses of action to be taken based on test results. When testing is completed, the results are compared with the associated acceptance criteria values and the applicable range is determined. Test results falling into the "Acceptable" range indicate that the associated component is in a state of operational readiness, and testing of the component shall continue at the normal test frequency. Test results falling in the "Alert" range indicate that the associated component, though in a state of operational readiness, is exhibiting degraded performance. If the results fall in the "Alert" range, the frequency of test for the component shall be increased per ASME/ANSI OMa-1988, Part 6. If the test results fall in the "Required Action" range, the component will be declared inoperable and corrective action initiated immediately.

The failure to perform the surveillance test of the 2 East CTS pump at an increased interval did not meet the requirements for testing under TS 4.0.5. The August 11, 2000, surveillance results confirmed that the pump was operational, and had not undergone additional degradation since the previous surveillance in June 2000. Failure to perform the surveillance at an increased interval therefore had minimal safety significance.

Corrective Actions

An extent of condition review was performed to determine if any other equipment had results outside the acceptable range that had not been identified and tested on an increased frequency. It was determined that the 2 West CTS pump also had vibration results in the Alert range that had not been previously identified. The pump was tested on June 2, 2000, and the surveillance would have been due again no later than July 18, 2000. The test was performed on July 6, 2000 as part of the schedule re-alignment after unit startup, and also satisfied the increased frequency requirement. The surveillance was performed again on August 25, 2000, with vibration results still in the Alert range.

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

The 2 AB Emergency Diesel Generator (EDG) AB-1 Jacket Water pump quarterly operability surveillance was performed on May 27, 2000, and the vibration results were in the Alert range. An increased frequency would have required retest no later than July 12, 2000. The test was not performed, however this did not result in the 2 AB EDG being inoperable, as the redundant Jacket Water pump, 2 AB-2, was operable during the entire period. The 2 AB-1 Jacket Water pump was tested on August 12, 2000. Test results remained in the Alert range for vibration.

The 2 East and West CTS pumps and the 2 AB EDG AB-1 Jacket Water pump have been placed on an increased frequency surveillance interval.

The IST program procedure, EHI-5071, "Inservice Testing Program Implementation," was reviewed. The procedure was determined to provide clear instruction on actions required when test results fall in the Alert range. Appropriate disciplinary action was taken in accordance with plant policy for the IST engineer who failed to identify the need for increased frequency of surveillance for the pumps.

The investigation revealed that the responsibility for generating a Condition Report (CR) for Alert range results is assigned to the IST program engineer who reviews the completed surveillance. The potential exists that the review could be delayed for several days, depending on when the surveillance is performed. It was also identified that no clear requirement or mechanism exists to notify the surveillance scheduling group of the need to increase the frequency of the surveillance interval when the test results fell into the Alert range. To provide additional barriers to recurrence of the reported event, the following procedural enhancements will be made:

- Operations guideline OHI-4016, "Conduct of Operations Guidelines," will be revised by September 30, 2000, to require Operations to initiate a CR when IST surveillance results fall in the Alert range. This revision will ensure that a CR is written promptly after completion of a surveillance.
- Engineering procedure EHI-5071, "Inservice Testing Program Implementation," will be revised to require that written notification be provided to the surveillance scheduling group when an IST component enters the Alert range and the associated surveillance frequency must be increased. This revision will also be completed by September 30, 2000.
- Plant Manager Procedure PMP-4030.EXE.001, "Conduct of Surveillance Testing," will be revised by October 30, 2000, to require that a CR be written whenever surveillance results fall in the Alert range. PMP-4030.EXE.001 will also be revised to incorporate changes to the coversheet used with TS Surveillances. Once revised, the coversheet will clearly document when surveillance results fall in the Alert range. These changes will provide additional barriers to prevent recurrence.

The root cause investigation for this event has not been completed. Based on the results of the completed investigation, this LER may be supplemented if additional, significant corrective and/or preventive actions are identified. Resolution of the vibration problem with the Unit 2 CTS pumps is being pursued as well, via an engineering action plan and the corrective action program.

Previous Similar Events

None