

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) D. C. Cook Nuclear Plant, Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 1 6 1	PAGE (3) 1 OF 0 3
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TITLE (4) Missed T/S Surveillance Due to the Failure to Identify/Perform Appropriate Post-design Change Testing

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 NAMES		DOCKET NUMBER(S)
0 6	2 3	8 6	8 6	0 2 0	0 0	0 7	2 2	8 6			0 5 0 0 0
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)											

OPERATING MODE (9) 4	POWER LEVEL (10) 0 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		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)	

LICENSEE CONTACT FOR THIS LER (12)

NAME J. E. Rutkowski - Assistant Plant Manager	TELEPHONE NUMBER 6 1 6 4 6 5 - 5 9 0 1
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH DAY YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On June 23, 1986, with Unit 2 in Mode 3 (Hot Standby) it was discovered that the reactor coolant temperature had been increased, to greater than or equal to 541 degrees F, prior to completing all applicable surveillance requirements for the narrow range Tav_g temperature detectors (RTD's). The temperature was increased to 541 degrees F on June 22, 1986 as the RTD's were thought to be operable. The failure to identify/perform appropriate post-design change testing led to this event. This condition is contrary to Technical Specification 3.3.2.1 Table 3.3-3 item 4d.

The temperature was promptly reduced to below 541 degrees F and the surveillance test completed. The as found conditions of the RTD's indicated they met Technical Specification requirements and that the plant did not operate outside of any safety boundaries. To prevent recurrence; 1) All design change coordinators will be counselled (by August 15, 1986) on the necessity to ensure adequate post-design change testing, and 2) the Plant Heatup Procedures have been changed to require signatures by the Instrument and Control Section, verifying the completion of the narrow range RTD channel functional tests (not a requirement associated with mode change verifications) prior to increasing reactor coolant system temperature to 541 degrees F.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

Conditions Prior to Occurrence

Unit 2 in Mode 4 (Hot Shutdown), reactor coolant Tavg equal to approximately 528 degrees F.

Description of Event

On June 23, 1986 at approximately 0630 hours, it was discovered, during surveillance test activities, that the Reactor Coolant System narrow range Tavg resistive temperature detectors (RTD's) (EIIIS/TI) channel functional tests (CFT's) were not conducted as required by Technical Specifications (T/S) prior to increasing Tavg above 541 degrees F. Temperature was taken above 541 degrees F at approximately 2300 hours, June 22, 1986 as it was believed that the applicable surveillance requirements had been met.

On June 20, 1986 plant heatup (in preparation for startup) was being held below 541 degrees while waiting for a design change to be completed on the Tavg narrow range RTD's. The Control Room was to be informed once the work was completed and the detectors declared operable (prior to continuing with heatup). On June 22, 1986 at 1637 hours, the Control Room operators were notified, by Design Change Section personnel, that the work was completed and the RTD's were "operable". However, while the RTD's themselves were operable, the operability of the "instrument channel" had not been verified, since the requirement to perform the applicable CFT's was overlooked. The Control Room operators believed the surveillance requirement had been completed when in fact they had not and at 1645 hours, heatup from 528 to 547 degrees F commenced.

The RTD's provide input to an ESF interlock (designated P-12) which provides steam line isolation on high steam flow above 541 degrees F. Also, with 3 of 4 Tavg channels above 541 degrees F, it prevents the manual block of safety injection actuation on low steam line pressure.

No structures, components or systems related to the event were inoperable at this time.

Cause of the Event

The root cause of this event was the failure to identify/perform appropriate post-design change testing prior to returning modified equipment to service. A contributing factor was the deficiency of the Plant Heatup Procedures to insure the completion of the narrow range RTD CFT's prior to increasing Reactor Coolant System Tavg to greater or equal to 541 degrees F.

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

Analysis of Event

T/S Table 3.1-3, Item 4d requires that the Low-Low Tavq signal be operable in Mode 3 (Hot Standby) above the P-12 setpoint (541 degrees F). This operability is assured by the performance of monthly CFT's. This report identifies an occasion when the plant was taken above 541 degrees F (for approximately 7 hours) without this CFT having been performed as required.

This condition represents a deviation from T/S requirements and as such is reportable per 10 CFR 50.73 (a) (2) (i), any operation or condition prohibited by T/S. The required CFT's were subsequently performed and all bistables (EIIIS/IS) were found to be within T/S requirements. We conclude therefore that; 1) while we failed to satisfy the surveillance requirements of the T/S, subsequent testing indicated that we did not operate outside any safety boundaries, and 2) this condition did not create a substantial hazard to the health and safety of the public.

Corrective Actions

Immediate action was taken, at the time of discovery, to reduce Reactor Coolant System temperature below 541 degrees F and conduct the missed surveillance. To prevent recurrence; 1) all design change coordinators will be counselled (by August 15, 1986) on the necessity to ensure adequate post-design change testing, and 2) the Plant Heatup Procedures have been changed to require signatures by the Instrument and Control Section, verifying the completion of the narrow range RTD channel functional tests (not a requirement associated with mode change verifications) prior to increasing reactor coolant system temperature to 541 degrees F.

Failed Component Identification

There were no component failures related to this event.

Previous Similar Events

None.



INDIANA & MICHIGAN ELECTRIC COMPANY

Donald C. Cook Nuclear Plant
P.O. Box 458, Bridgman, Michigan 49106

July 22, 1986

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

Operating License DPR-74
Docket No. 50-316

Document Control Manager:

In accordance with the criteria established by 10CFR50.73 entitled Licensee Event Reporting System, the following report/s are being submitted:

86-020-0

Sincerely,

W.G. Smith, Jr.
Plant Manager

/mg

Attachment

cc: John E. Dolan
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