

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8707210844 DOC. DATE: 87/07/10 NOTARIZED: NO DOCKET #
 FACIL: 50-316 Donald C. Cook Nuclear Power Plant, Unit 2, Indiana & 05000316
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 POSTLEWAIT, T. K. Indiana & Michigan Electric Co.
 SMITH, W. G. Indiana & Michigan Electric Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-006-00: on 870615, containment spray pumps declared
 inoperable due to improperly performed Tech Spec
 surveillances testing. Caused by improper labeling of flow
 instrumentation being maintained. Pumps tested. W/870714 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 5
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD3-3 LA	1 1	PD3-3 PD	1 1
	WIGGINGTON, D	1 1		
INTERNAL:	ACRS MICHELSON	1 1	ACRS MOELLER	2 2
	AEOD/DOA	1 1	AEOD/DSP/NAS	1 1
	AEOD/DSP/ROAB	2 2	AEOD/DSP/TPAB	1 1
	DEDRO	1 1	NRR/DEST/ADE	1 0
	NRR/DEST/ADS	1 0	NRR/DEST/CEB	1 1
	NRR/DEST/ELB	1 1	NRR/DEST/ICSB	1 1
	NRR/DEST/MEB	1 1	NRR/DEST/MTB	1 1
	NRR/DEST/PSB	1 1	NRR/DEST/RSB	1 1
	NRR/DEST/SGB	1 1	NRR/DLPQ/HFB	1 1
	NRR/DLPQ/QAB	1 1	NRR/DOEA/EAB	1 1
	NRR/DREP/RAB	1 1	NRR/DREP/RPB	2 2
	NRR/PMAS/ILRB	1 1	NRR/PMAS/PTSB	1 1
	<u>REG FILE</u> 02	1 1	RES DEPY GI	1 1
	RES TELFORD, J	1 1	RES/DE/EIB	1 1
	RGN3 FILE 01	1 1		
EXTERNAL:	EG&G GROH, M	5 5	H ST LOBBY WARD	1 1
	LPDR	1 1	NRC PDR	1 1
	NSIC HARRIS, J	1 1	NSIC MAYS, G	1 1

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				PAGE (3) 1 OF 0 4									
TITLE (4) IMPROPERLY PERFORMED TECHNICAL SPECIFICATION SURVEILLANCE DUE TO A BREAKDOWN IN CONTROL OF WORK PROCESSES AND PLANT MODIFICATIONS																							
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	1	5	8	7	8	7	0	0	6	0	0	0	7	1	4	8	7	0	5	0	0	0
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																					
1		20.402(b)				20.405(c)				50.73(a)(2)(iv)				73.71(b)									
POWER LEVEL (10)		0 8 0				20.405(a)(1)(i)				50.73(a)(2)(v)				73.71(c)									
		20.405(a)(1)(ii)				50.73(a)(2)(vi)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 365A)									
		20.405(a)(1)(iii)				50.73(a)(2)(viii)				50.73(a)(2)(ix)													
		20.405(a)(1)(iv)				50.73(a)(2)(x)				50.73(a)(2)(xi)													
		20.405(a)(1)(v)				50.73(a)(2)(xii)				50.73(a)(2)(xiii)													
LICENSEE CONTACT FOR THIS LER (12)																							
NAME T. K. Postlewait- Technical Engineering Superintendent										TELEPHONE NUMBER AREA CODE 6 1 6 4 6 5 - 5 9 0 1													
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																							
CAUSE	SYSTEM	COMPONENT	MANUFAC- TURER	REPORTABLE TO NRC		CAUSE	SYSTEM	COMPONENT	MANUFAC- TURER	REPORTABLE TO NRC													
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 fifteen single-space typewritten lines) (16)

On June 15, 1987 at 1800 hours, with Unit 2 at 90 percent Rated Thermal Power, both Containment Spray (CTS) Pumps were declared inoperable due to missed Technical Specification (T/S) Surveillances. Improper labeling of the test flow gauge meter face resulted in surveillance tests having been performed below the T/S 4.6.2.1.b minimum flow requirement since the initial startup of the unit (1978).

A unit shutdown was initiated per T/S 3.0.3 and an Unusual Event was declared at 1855 hours. The East CTS pump was satisfactorily tested in accordance with T/S 4.6.2.1.b at 2053 hours at which time the unit shutdown and Unusual Event were terminated. The West CTS pump was satisfactorily tested and declared operable at 0038 hours on June 16, 1987.

A review of the data determined that although the test flow rate was below the T/S limits, the pumps had not degraded below the original factory test data and their performance was, and still is, well above the T/S criteria. Because no pump degradation has occurred, no decrease in containment spray flow below that assumed in the analysis would be expected.

Based on the above information, it is concluded that the condition did not constitute a significant safety problem as defined in 10CFR50.59.

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PDR ADDCK 05000316
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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
D. C. Cook Nuclear Plant - Unit 2	0 5 0 0 0 3 1 6 8 7	—	0 0 6	— 0 0	0 2	OF	0 4

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

Conditions Prior to Occurrence

Unit 1 in Mode 1 (Power Operation) at 90 Percent Rated Thermal Power
Unit 2 in Mode 1 (Power Operation) at 80 Percent Rated Thermal Power

Description of Event

On June 15, 1987, during Engineering reviews of In-Service Inspection pump instrumentation for the Containment Spray System (CTS) (EIIS/BE), it was discovered that flow labels (in gpm), which had been added as a temporary measure on differential pressure gauge IFI-245 (EIIS/PDI) did not correlate to the instrument calibration as established in the flow element characteristic curve. Further investigation determined that the temporary flow labels were being used (in lieu of the permanent gauge markings) to establish the pump flows (in gpm) during Technical Specification required Surveillance Testing. Permanent gauge face markings are 0 - 100 percent.

The use of the improper labels resulted in surveillance testing having been performed below the Technical Specification (T/S) 4.6.2.1.b minimum flow requirement. A review of past test data indicates that this condition had existed since the initial startup of the unit (1978).

At 1800 hours on June 15, 1987, both CTS pumps were declared inoperable due to improperly performed Technical Specification Surveillances. A unit shutdown was initiated per T/S 3.0.3 and an Unusual Event was declared at 1855 hours. The NRC was notified of the event via the ENS at 1906 hours.

T/S 3.6.2.1 requires that the independent Containment Spray Systems (CTS) be operable with each spray system capable of taking suction from the Refueling Water Storage Tank (RWST) (EIIS/TK) and transferring suction to the Containment Sump (EIIS/WK). T/S 4.6.2.1.b requires that each Containment Spray shall be demonstrated operable by verifying, that on recirculation flow, each pump develops a discharge pressure of ≥ 255 psig at a flow of ≥ 700 gpm, when tested pursuant to Specification 4.0.5.

Investigation into the origin of the temporary flow labels leads us to believe they were added sometime prior to initial unit startup. During the preoperational testing of Unit 1 (1974), some temporary alterations were made to the internals of IFI-245 on Unit 1 in order to facilitate testing activities. At that time plant personnel were instructed to add markings to the Unit 1 gauge face (in gpm) to correspond to the temporary alteration. It is presumed that since Unit 1 and Unit 2 IFI-245 were identical, the same labels were added to Unit 2. When permanent replacement parts for IFI-245 arrived onsite they were to be installed in both units. It appears that while they were installed in Unit 1, they were not installed in Unit 2 and the temporary labels were never removed from either unit.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) D. C. Cook Nuclear Plant - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 1 6 8 7 - 0 0 6 - 0 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
					0 3	OF	0 4

TEXT (If more space is required, use additional NRC Form 368A's) (17)

Description of Event (cont'd)

The error was conservative with respect to Unit 1 and the pumps were always tested at a flow greater than was indicated (in gpm), thus Unit 1 has always been in compliance with T/S 4.6.2.1.b. The error for Unit 2 however was nonconservative and the actual flows were less than indicated (in gpm), resulting in performing the Technical Specification tests at approximately 550 gpm rather than the ≥ 700 gpm as required.

The East CTS pump was satisfactorily tested and declared operable at 2053 hours on June 15, 1987, at which time the Unusual Event and the T/S 3.0.3 Shutdown were terminated. The West CTS pump was satisfactorily tested and declared operable at 0038 hours on June 16, 1987.

There were no inoperable structures, components or systems that contributed to this event.

Cause of Event

The root cause of the event was a breakdown in control of the processes and plant modification performed as a result of the Unit 1 pre-operational testing of the Containment Spray System. This resulted in improper labeling of flow instrumentation being maintained in both Units and failure to complete installation of correct parts in the Unit 2 instrumentation.

Analysis of Event

This event is being reported pursuant to 10CFR50.73(a)(2)(ii). An Engineering review of the data determined that although the test flow rate was below the Technical Specification limits, the pumps had not degraded below the original factory test data and their performance was, and still is, well above the T/S criteria. Because no pump degradation has occurred, no decrease in containment spray flow below that was assumed in the accident analysis would be expected.

Based on the above information, it is concluded that the condition did not constitute a significant safety problem as defined in 10CFR50.59.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
D. C. Cook Nuclear Plant - Unit 2	0 5 0 0 0 3 1 6 8 7 -	0	0	6	-	0 0 0 4 OF 0 4

TEXT (If more space is required, use additional NRC Form 368A's) (17)

Corrective Actions

Both pumps were satisfactorily tested and declared operable. The temporary labels have been removed. The applicable surveillance procedures and Technical Data Book Figures have been changed to reference the flow in terms of permanent meter scale markings.

This event is considered an isolated event, limited to IFI-245, resulting from a breakdown in control of the work and plant modification process during the pre-operational testing phase of the Containment Spray System. Current administrative policies/procedures pertaining to work and plant modification processes are more detailed in their requirements than they were during the time period of pre-operational testing. Therefore, it has been concluded that no programmatic changes are necessary as a result of this incident.

Failed Component Identification

No component failures were identified during the investigation of this event.

Previous Similar Events

None



INDIANA & MICHIGAN ELECTRIC COMPANY

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July 14, 1987

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

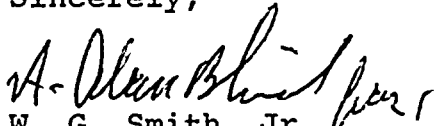
Operating License DPR-74
Docket No. 50-316

Document Control Manager:

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

87-006-00

Sincerely,


W. G. Smith, Jr.
Plant Manager

WGS:afh

Attachments

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