

REGULATOR INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8704200243 DOC. DATE: 87/04/13 NOTARIZED: NO DOCKET #
 FACIL: 50-316 Donald C. Cook Nuclear Power Plant, Unit 2, Indiana & 05000316
 AUTH. NAME AUTHOR AFFILIATION
 BEILMAN, T. P. Indiana & Michigan Electric Co.
 SMITH, W. G. Indiana & Michigan Electric Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-003-00: on 870107, overpower delta temp bistables
 failed to trip during instrumentation calibr due to
 procedural deficiency. Caused by personnel error. Procedure
 revised. W/870413 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	1 1
	AEOD/DOA	1 1	AEOD/DSP/ROAB	2 2
	AEOD/DSP/TAPB	1 1	AEOD/DSP/TPAB	1 1
	NRR/ADT	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/MFR	1 1	NRR/DEST/MTB	1 1
	NRR/DEST/PSB	1 1	NRR/DEST/RSB	1 1
	NRR/DEST/SGR	1 1	NRR/DLPQ/HFB	1 1
	NRR/DLPQ/QAB	1 1	NRR/DOEA/EAB	1 1
	NRR/DREP/EPB	1 1	NRR/DREP/RAB	1 1
	NRR/DREP/RPB	2 2	NRR/PMAS/ILRB	1 1
	NRR/PMAS/PTSB	1 1	REC FILE 02	1 1
	RES SPEIS, T	1 1	RCN3 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 1				PAGE (3) OF 0 4		
TITLE (4) Failure to Trip Overpower Delta Temperature Bistables During Power Range Nuclear Instrumentation Calibration Due to Procedural Deficiency																
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 1	0 7	8 7	8 7	0 0 3	0 0 0	0 4	1 3	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)				20.406(c)				60.73(a)(2)(iv)				73.71(b)		
POWER LEVEL (10)		20.406(a)(1)(i)				60.36(c)(1)				60.73(a)(2)(v)				73.71(c)		
0 8 1 0		20.406(a)(1)(ii)				60.36(c)(2)				60.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)		
20.406(a)(1)(iii)				60.73(a)(2)(i)				60.73(a)(2)(viii)(A)								
20.406(a)(1)(iv)				60.73(a)(2)(ii)				60.73(a)(2)(viii)(B)								
20.406(a)(1)(v)				60.73(a)(2)(iii)				60.73(a)(2)(ix)								
LICENSEE CONTACT FOR THIS LER (12)																
NAME T. P. Beilman I&C/Planning Department 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	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS						
X	IIG	I J X	W 1 1 2 1 0	Y												
SUPPLEMENTAL REPORT EXPECTED (14)																
YES (If yes, complete EXPECTED SUBMISSION DATE)										X NO		EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On March 13, 1987 the following event was determined to be reportable.

On January 8, 1987 we discovered that procedure 2 THP 6030 IMP.231 "Nuclear Instrumentation System Power Range Calibration" did not specify a Technical Specification (T.S.) requirement to trip the Overpower Delta Temperature (OPAT) bistables during instrument calibration. The requirement to trip the bistables should have been added to the procedure when T.S. Amendment 82 became effective on May 21, 1986, adding the delta flux input to the setpoint calculation. The procedural deficiency resulted in a violation of T.S. 3.3.1.1 each time the procedure was performed since May 1986. The procedure was changed on the discovery date to add the bistable tripping requirements.

The procedural deficiency was due to the procedure being overlooked for revision requirements during the T.S. Amendment impact review.

T.S. Amendment procedure impact reviews for the Instrumentation and Control Department are now under the control of the Production Control evaluators. They have been directed to refer to PMI-4030 "Technical Specification" as a starting place for all impact reviews. In addition, PMI-4030 was reviewed by the evaluators subsequent to the January 7, 1987 event to verify its accuracy.

8704200243 870413
PDR ADOCK 05000316
S PDR

IE29
11

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 3	— 0 0	0 2	OF	0 4

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

Conditions Prior to Event

Unit Two was in Mode 1 (Power Operation) at 80 percent reactor thermal power.

Description of Event

A wiring modification to the OPAT Reactor Protection Channels (IEEE/CHA) that provided Delta Flux input into the OPAT setpoint calculation was completed in accordance with Design Change RFC DC-2-2916. This change was required by the Unit Two Cycle 6, transient analysis which takes credit for the delta flux input to the OPAT Reactor Protection function. T.S. Amendment 82 included this change in the OPAT setpoint calculation. During the review of the T.S. amendment for procedural impact, 2 THP 6030 IMP.231 was not noted as requiring revision. Amendment 82 became effective on May 21, 1986.

Subsequently, IMP.231 was performed on July 17, 1986 and again on October 13, 1986. During performance of the calibration procedure, the instrument power fuses (IEEE/FU) are removed and the detector cable (IEEE/CBL) is disconnected. A false signal is fed to the channel for calibration. During the test, the delta flux input is varied from 0 to 120 percent. The IMP takes 2 or more hours to complete for each drawer. The IMP was again performed on January 8, 1987. However, while calibrating Channel III (N-43) the channel was found to have a bad power supply (IEEE/JX). I&C personnel informed the Unit Supervisor that Channel III was inoperable at 1325 hours. Since the IMP was being performed using a procedure, the Unit Supervisor believed the appropriate bistable had been tripped as part of the IMP. At 1425 hours the Unit Supervisor checked the IMP against the Operations procedure 2 OHP 4022.013.004 "NI Power Range Malfunction" and 2 OHP 4022.013.006 "Bistable Tripping", and discovered that all bistables were tripped with the exception of the OPAT Reactor Trip and OPAT Turbine Runback.

At 1448 hours the two bistables were tripped.

IMP.231 was revised on January 8, 1987 to include tripping the bistables for OPAT reactor trip and OPAT turbine runback.

A condition report regarding the event was written on January 7, 1987. The initial evaluation of the event conducted by the Shift Technical Advisor concluded that there were no immediate reporting requirements. On January 8, 1987 the plant Problem Assessment Group (PAG) reviewed the event. However, documentation of the review does not indicate that the event was determined to be reportable per 10CFR50.73. Personnel present during the review could not recollect the conclusion reached relative to the event's reportability. During the subsequent investigation, the reportability was not recognized.

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 3	— 0 0	0 3	OF	0 4

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

The reportability of the event was questioned during the post-investigation review on March 12, 1986 prior to presentation to the Plant Nuclear Safety Review Committee. The event was re-evaluated by the PAG on March 13, 1987 and determined to be potentially reportable.

Other than the failed power supply for N-43, there were no other structures, components or systems which contributed to this event.

Cause

The cause of the original event (procedural deficiency) was personnel error on the part of the individuals performing the T.S. Amendment impact review to accurately identify and revise affected procedures.

The cause of the failure to recognize the reportability of the event was not determined. It could not be confirmed whether or not the documentation of the assessment review was an accurate reflection of the PAG's conclusions. Also contributing to the failure to report the event was the fact that following the initial review by the PAG, the event's reportability was not questioned.

Analysis of the Event

An analysis of the safety aspects of the event was performed. It was concluded that the failure to trip the OPAT bistables during calibration of the Power Range Nuclear Instrumentation Channels, did not significantly degrade plant safety since no credit is taken for the OPAT trip in the safety analysis.

Corrective Action

IMP.231 was revised to include the tripping of the bistables for OPAT Reactor Trip and Turbine Runback and other I and C procedures were reviewed for potential impact. Further, the I and C Section amendment procedure impact reviews are now the responsibility of the Production Control evaluators who have been instructed to use PMI-4030 "Technical Specifications" as a central reference point for relating T.S. to procedures. In conjunction with this requirement, an intensive review was performed of PMI-4030 to ensure it was complete and accurate for I and C procedures.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

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	3	-	0	0
						0	4
						OF	0 4

TEXT (If more space is required, use additional NRC Form 365A's) (17)

Administrative controls have been adopted to ensure that PAG review results are documented prior to the distribution of a problem report to the department assigned the investigation. As an enhancement to the corrective action program, training dealing specifically with the determination of event reportability will be provided to key plant personnel (event evaluators, PAG members, etc.) by June 1, 1987.

Also, I and C Department Problem Report evaluators have been directed to check all reports against reportability requirements before, during, and after the investigation. This is to be done regardless of the initial evaluation due to the limited information available prior to investigation.

A memo was written to all department heads cautioning them to remind their evaluators that information gathered during investigation of problem reports may affect the initial reporting classification.

Failed Component Identification

Power Range Nuclear Instrumentation Power Supply (plant designation N-43).

Manufacturer: Westinghouse

Model Number: UPM W-X54W

EIIS:JX

Previous Similar Events

LER 315/86-022



INDIANA & MICHIGAN ELECTRIC COMPANY

DONALD C. COOK NUCLEAR PLANT
P.O. Box 458, Bridgman, MI 49106
Telephone (616) 465-5901

April 13, 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:

87-003-0

Sincerely,


W. G. Smith, Jr.

/afh

Attachment

cc: John E. Dolan
A. B. Davis, Region III
M. P. Alexich
R. F. Kroeger
H. B. Brugger
R. W. Jurgensen
NRC Resident Inspector
R. C. Callen
G. Charnoff, Esq.
D. Hahn
INPO
PNSRC
A. A. Blind
Dottie Sherman, ANI Library
File

TE22
11