

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9407130309 DOC.DATE: 94/07/06 NOTARIZED: NO DOCKET #
 FACIL:50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana M 05000315
 AUTH.NAME AUTHOR AFFILIATION
 BEILMAN,T.P. Indiana Michigan Power Co. (formerly Indiana & Michigan Ele
 BLIND,A.A. Indiana Michigan Power Co. (formerly Indiana & Michigan Ele
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 94-007-00:on 940607,determined that rod position
 indication greater than 12 steps from demand position
 indication.Caused by failure to follow procedure as written.
 Correct data used to determine rod position.W/940706 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 4
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD3-1 PD	1 1	HICKMAN,J	1 1
INTERNAL:	AEOD/DSP/TPAB	1 1	AEOD/ROAB/DSP	2 2
	NRR/DE/EELB	1 1	NRR/DE/EMEB	1 1
	NRR/DORS/OEAB	1 1	NRR/DRCH/HHFB	1 1
	NRR/DRCH/HICB	1 1	NRR/DRCH/HOLB	1 1
	NRR/DRSS/PRPB	2 2	NRR/DSSA/SPLB	1 1
	NRR/DSSA/SRXB	1 1	NRR/PMAS/IRCB-E	1 1
	REG FILE 02	1 1	RES/DSIR/EIB	1 1
	RGN3 FILE 01	1 1		
EXTERNAL:	EG&G BRYCE,J.H	2 2	L ST LOBBY WARD	1 1
	NRC PDR	1 1	NSIC MURPHY,G.A	1 1
	NSIC POORE,W.	1 1	NUDOCS FULL TXT	1 1

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL
 DESK, ROOM P1-37 (EXT. 504-2083) TO ELIMINATE YOUR NAME FROM
 DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

FULL TEXT CONVERSION REQUIRED
 TOTAL NUMBER OF COPIES REQUIRED: LTTR 26 ENCL 26

P
R
I
O
R
I
T
Y
1
D
O
C
U
M
E
N
T

Indiana Michigan
Power Company
Cook Nuclear Plant
One Cook Place
Bridgman, MI 49106
616 465 5901



INDIANA
MICHIGAN
POWER

July 6, 1994

United States Nuclear Regulatory Commission
Document Control Desk
Rockville, Maryland 20852

Operating Licenses DPR-58
Docket No. 50-315

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:

94-007-00

Sincerely,

A. A. Blind
Plant Manager

/sb

Attachment

c: J. B. Martin, Region III
E. E. Fitzpatrick
P. A. Barrett
R. F. Kroeger
M. A. Bailey - Ft. Wayne
NRC Resident Inspector
J. B. Hickman - NRC
J. R. Padgett
G. Charnoff, Esq.
D. Hahn
INPO
S. J. Brewer

120009

9407130309 940706
PDR ADCK 05000315
S PDR

IF22
11

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), 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)

D. C. Cook Nuclear Plant - Unit 1

DOCKET NUMBER (2)

05000 315

PAGE (3)

1 OF 3

TITLE (4) Exceeded Technical Specification Action Statement Due to Unnoticed Inaccuracy in Calculation Used to Determine Rod Position

EVENT DATE (5)			LER NUMBER (6)			REPORT NUMBER (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
06	07	94	94	-- 007 --	00	07	06	94	FACILITY NAME	DOCKET NUMBER
										05000
OPERATING MODE (9)		1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more) (11)							
POWER LEVEL (10)		63%	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	
			20.405(a)(1)(iii)		X 50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		(Specify in Abstract below and in Text, NRC Form 366A)	
			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

T. P. Beilman - Maintenance Superintendent

TELEPHONE NUMBER (include Area Code)

616-465-5901

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS
									--

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 15 single-spaced typewritten lines) (16)

On June 7, 1994, at 0843 hours with Unit 1 in Mode 1 (Power Operation) it was determined that the Rod Position Indication (RPI) for Rod B-6 was indicating greater than 12 steps from the Demand Position Indication. At 0906 hours coil stack voltage measurements and calculations were completed, with rod position determined to be within the 12 steps required by Technical Specifications. The procedure was repeated for Rod B-6 at 1408 and 2000 hours, with the same results.

The data sheet for 2000 hours was later reviewed by the afternoon supervisor, who discovered that the calculations had been completed incorrectly each time they were performed since the Rod Position Indicator (RPI) had been declared inoperable. When the calculations were corrected it was found that the coil stack voltages indicated the rod's position to be greater than 12 steps from demand.

Reactor Engineering was called in to perform the required flux map, which determined that Rod B-6 was within the required 12 steps of demand. The flux map was performed at 2307 hours, exceeding the 8 hour LCO requirement of Technical Specification 3.1.3.2 by more than 6 hours.



LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST, 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
D. C. Cook Nuclear Plant Unit 1	0 5 0 0 0 3 1 5	9 4	0 0 7	0 0	0 2	OF 0 3	

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

Description of Event:

On 6-7-94 the Instrumentation and Control supervisor was notified by Operations for Unit 1 that Rod Position Indication for Rod B-6 (EIIS:ZI/AA) was >12 steps from demand and that it would be necessary to take secondary coil stack voltage readings per procedure ** 12 IHP 6030IMP.038 to determine rod position.

The procedure for the voltage readings was performed at 0906 hours, and based on calculations, Rod B-6 (EIIS/ZI-AA) was determined to be at 218 steps with the bank counter at 209 steps, within the 12 steps required by Technical Specification 3.1.3.2. The procedure was repeated at 1408 hours and the position was again determined to be within the required twelve steps.

The procedure was performed a third time at 2000 hours and the position determined to be 221 steps with demand at 212 steps. The afternoon supervisor reviewed the data sheet from the 2000 hours procedure performance and discovered that the data used to calculate the rod position was incorrect. Per the corrected calculation, the rod position was 238 steps, which exceeds Technical Specification 3.1.3.2. A review of the data sheets from the performance of ** 12IHP 6030IMP.0380 at 0906 and 1408 hours revealed that the same calculation error had also been made during the previous performances of the procedure.

Reactor Engineering was immediately contacted to perform the flux map required by Technical Specifications. The flux map was completed satisfactorily on 6/8/94 at 0029 hours.

Because the data from the original performance of the stack coil voltage reading procedure would have indicated a position greater than 12 steps from demand if the calculation was performed correctly, a flux map should have been performed within 8 hours of Rod B-6's (EIIS:ZI/AA) Rod Position Indication (RPI) being declared inoperable. The error was not discovered until more than 11 hours had elapsed.

Cause of Event:

This event was caused by a failure to follow the procedure as written, and perform self-checking. It appears that the appropriate steps in the coil stack voltage procedure were not carefully read or referred to during the performance of the procedure. Because this event involved more than one technician, the situation appears to have been contributed to by a procedure that was not sufficiently human factored for the complexity of the task.



LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) D. C. Cook Nuclear Plant Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 3 1 5 9 4	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		—	0 0 7	—	0 0	0 3	OF 0 3

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

Analysis of Event:

This event has been determined to be reportable under the provisions of 10CFR50.73(a)(2)(i)(B), as operation prohibited by plant Technical Specifications. Technical Specification 3.1.3.2 requires that all shutdown and control rod position indicator channels and the demand position indication system shall be operable and capable of determining the rod positions within plus or minus 12 steps. If this cannot be met, the Action Statement required that the position of the non-indicating rod be determined indirectly by the movable incore detectors at least once per 8 hours.

Because the data sheet inaccuracies of the 0906 and 1408 hours performances of **12 IHP 6030.IMP.038 were not discovered until after the 8 hour Action Statement had expired, the plant was operating in a manner prohibited by Technical Specifications.

Corrective Actions:

The correct data was used to determine the rod's position from the coil stack voltage reading. When that data indicated that the rod position did not meet the requirement of Technical Specification 3.1.3.2, Reactor Engineering performed a flux map to determine rod position. Rod B-6 was verified to be within 12 steps of demand at 0029, and was restored to operable status at 1606 hours on 6/8/94.

The procedure for coil stack voltage readings, **12 IHP 6030 IMP.038, was revised to clarify data collection.

Administrative measures have been directed to the technicians involved in this event to reinforce Plant policy on procedural adherence.

Previous Similar Events:

None

