

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)  
D. C. COOK NUCLEAR PLANT - UNIT 2

DOCKET NUMBER (2)

0 5 0 0 0 3 1 1 6 1 OF 0 2

TITLE (4)

AUTOMATIC ESF ACTUATION - CONTAINMENT PURGE ISOLATION

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)				
1	2	2	8	4	8	4	0	3	4	0	0	0	1	1	6

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)													
5		20.402(b)		20.406(c)	X	50.73(a)(2)(iv)		73.71(b)							
		20.406(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)							
		20.406(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vi)									
		20.406(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)									
		20.406(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)									
		20.406(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(ix)									

LICENSEE CONTACT FOR THIS LER (12)  
NAME  
K. R. BAKER, OPERATIONS SUPERINTENDENT

TELEPHONE NUMBER

AREA CODE

611 16 416 51-1519 1011

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)									
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

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 12-23-84, WITH THE REACTOR COOLANT SYSTEM IN MODE 5 BEING FILLED AND VENTED, AN AUTOMATIC ENGINEERED SAFETY FEATURES ACTUATIONS OCCURRED. TWO CONTAINMENT HIGH RADIATION (PARTICULATE) ALARMS, AT 0203 AND 0949 HOURS, RESULTED IN TRAIN "B" AND TRAIN "A" (RESPECTIVELY) CONTAINMENT PURGE ISOLATIONS.

AT 0203 HOURS, A LOWER CONTAINMENT AIRBORNE PARTICULATE MONITOR (ERS-2401) ALARMED, INITIATING A TRAIN "B" CONTAINMENT VALVE ISOLATION (CVI). AT 0949 HOURS, A LOWER CONTAINMENT AIRBORNE PARTICULATE MONITOR (ERS-2301) ALARMED, INITIATING A TRAIN "A" CVI. BOTH TRAIN INITIATIONS WERE CAUSED BY A LEAKING LOOP 4 RTD BYPASS VALVE (2RC-107).

AFTER EACH CVI, OPERATORS VERIFIED THAT ALL REQUIRED AUTOMATIC ACTIONS OCCURRED AND PERFORMED ALL REQUIRED MANUAL ACTIONS. TO PREVENT SIMILAR TRIPS DURING STARTUP, THE AIRBORNE PARTICULATE MONITORS TRIP FUNCTION WAS BLOCKED AS ALLOWED IN MODE 5 AND IN ACCORDANCE WITH PLANT PROCEDURES UNTIL RADIATION LEVELS STABILIZED AND PRIOR TO ENTRY INTO MODE 4.

PREVIOUS OCCURRENCES OF A SIMILAR NATURE WERE REPORTED IN LER'S 84-6, 84-7, 84-10, DOCKET NUMBER 50-316, AND 84-12 DOCKET NUMBER 50-315.

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PDR ADOCK 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 4	- 0 3 4	- 0 0	0 2	OF 0 2	

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

ON 12-23-84, WITH THE REACTOR COOLANT SYSTEM IN MODE 5 AND BEING FILLED AND VENTED, AN AUTOMATIC ENGINEERED SAFETY FEATURES ACTUATION OCCURRED. TWO CONTAINMENT HIGH RADIATION (PARTICULATE) ALARMS, AT 0203 AND 0949 HOURS, RESULTED IN TRAIN "B" AND TRAIN "A" (RESPECTIVELY) CONTAINMENT PURGE ISOLATIONS.

AT 0203 HOURS, A LOWER CONTAINMENT AIRBORNE PARTICULATE MONITOR (ERS-2401) ALARMED, INITIATING A TRAIN "B" CONTAINMENT VALVE ISOLATION (CVI). THE ALARM WAS DUE TO A LOOP 4 RTD BYPASS VALVE (2RC-107) THAT LEAKED REACTOR COOLANT INTO THE CONTAINMENT ATMOSPHERE. WHEN THE PARTICULATE ACTIVITY REACHED THE HIGH ALARM SETPOINT, AUTOMATIC ACTUATION OF THE TRAIN "B" CVI OCCURRED.

AT 0949 HOURS, A LOWER CONTAINMENT AIRBORNE PARTICULATE MONITOR (ERS-2301) ALARMED, INITIATING A TRAIN "A" CVI. THIS ALARM WAS ALSO DUE TO THE LEAKING LOOP 4 RTD BYPASS VALVE. THE PHYSICAL LOCATION OF THE ERS-2301 SAMPLE INTAKE IS FARTHER AWAY FROM 2RC-107 THAN ERS-2401, THUS REQUIRING MORE TIME FOR PARTICULATE CONTAMINATION TO REACH ERS-2301. STARTING TWO REACTOR COOLANT PUMPS AT 0855 AND 0920 HELPED INCREASE THE DISPERSION OF THE CONTAMINATION AND THE ALARM OCCURRED SHORTLY AFTERWARDS.

AFTER EACH CVI, OPERATORS VERIFIED THAT ALL REQUIRED AUTOMATIC ACTIONS OCCURRED AND PERFORMED ALL REQUIRED MANUAL ACTIONS. TO PREVENT SIMILAR TRIPS DURING STARTUP, THE AIRBORNE PARTICULATE MONITORS' TRIP FUNCTION WAS BLOCKED AS ALLOWED IN MODE 5 AND IN ACCORDANCE WITH PLANT PROCEDURES UNTIL RADIATION LEVELS STABILIZED AND PRIOR TO ENTRY INTO MODE 4.

PREVIOUS OCCURRENCES OF A SIMILAR NATURE WERE REPORTED IN LER'S: 84-6, 84-7, 84-10, DOCKET NUMBER 50-316 AND 84-12, DOCKET NUMBER 50-315.



**INDIANA & MICHIGAN ELECTRIC COMPANY**

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

January 22, 1985

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

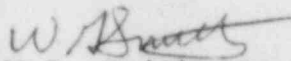
Operating License DPR-74  
Docket No. 50-316

Document Control Manager:

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

RO 84-034-0

Sincerely,

  
W.G. Smith, Jr.  
Plant Manager

/cbm

Attachment

cc: John E. Dolan  
J.G. Keppler, RO:III  
M.P. Alexich  
R.F. Kroeger  
H. Brugger  
NRC Resident Inspector  
R.C. Callen, MPSC  
G. Charnoff, Esq.  
J.M. Hennigan  
INPO  
PNSRC  
J.F. Stietzel  
E.L. Townley  
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