

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
DONALD C. COOK - UNIT 2DOCKET NUMBER (2)
0 5 0 0 0 3 1 6 1 OF 0 2TITLE (4)
BROKEN STEM ON RTD MANIFOLD ISOLATION VALVES

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	8	8	5	0 0 7	0	0	3	DONALD C. COOK, UNIT 1		0 5 0 0 0 3 1 5
1	2	8	8	5	0 0 7	0	0	3			0 5 0 0 0 3 1 5

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 8: (Check one or more of the following) (11)									
POWER LEVEL (10) 0 0 0	5	20.402(b)	20.406(e)	80.73(a)(2)(iv)	73.71(b)						
		20.406(a)(1)(i)	80.38(a)(1)	80.73(a)(2)(v)	73.71(c)						
		20.406(a)(1)(ii)	80.38(a)(2)	80.73(a)(2)(vi)	<input checked="" type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 306A)						
		20.406(a)(1)(iii)	80.73(a)(2)(i)	80.73(a)(2)(vii)(A)	VOLUNTARY						
		20.406(a)(1)(iv)	80.73(a)(2)(ii)	80.73(a)(2)(vii)(B)							
20.406(a)(1)(v)	80.73(a)(2)(iii)	80.73(a)(2)(ix)									

LICENSEE CONTACT FOR THIS LER (12)
NAME
N. C. WILLIAMS - MAINTENANCE DEPARTMENT SUPERINTENDENT
TELEPHONE NUMBER
AREA CODE 6 1 1 6
4 6 5 1 - 5 9 1 0 1

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	
B	A B	I S V	E 0 9 5	Y						

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO				

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

THIS LER IS BEING SUBMITTED DUE TO THE SIMILARITY BETWEEN THE FOLLOWING EVENTS AND THOSE DESCRIBED IN IE INFORMATION NOTICE 84-48 AND 84-48, SUPPLEMENT 1.

WITH UNIT 2 REACTOR COOLANT SYSTEM IN MODE 5 (COLD SHUTDOWN) ON 12/28/84, NON-DESTRUCTIVE EXAMINATIONS REVEALED THAT SEVEN VALVES HAD BREAKAGE OR CRACK INDICATIONS IN THE VALVE STEM IN THE AREA OF DISC ATTACHMENT. THE SUBJECT VALVES ARE ALL 2 INCH ROCKWELL-EDWARD GLOBE VALVES AND SERVE AS ISOLATIONS FOR REACTOR COOLANT LOOP RESISTANCE TEMPERATURE DETECTOR (RTD) MANIFOLDS. ALL OF THE IDENTIFIED VALVES WERE REPLACED WITH 2 INCH CONVAL GLOBE VALVES.

ON 1/16/85, WITH UNIT 1 REACTOR COOLANT SYSTEM IN MODE 5 (COLD SHUTDOWN), NON-DESTRUCTIVE EXAMINATIONS REVEALED A TOTAL OF ELEVEN 2 INCH ROCKWELL-EDWARD GLOBE VALVES WITH STEM INDICATIONS SIMILAR TO THOSE FOUND IN THE UNIT 2 INSPECTIONS. ALL OF THE IDENTIFIED VALVES WERE REPLACED WITH CONVAL OR KEROTEST 2 INCH GLOBE VALVES.

THE VALVE REPLACEMENTS ARE A CONTINUATION OF A PROGRAM BEGUN IN 1979 FOR REPLACEMENT OF ROCKWELL-EDWARD VALVES IN THE UNIT 1 AND UNIT 2 RTD MANIFOLDS.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/21/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
DONALD C. COOK - UNIT 2	0 5 0 0 0 3 1 6	8 5	- 0 0 7	- 0 0	0 2	OF	0 2

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

THIS LER IS BEING SUBMITTED DUE TO THE SIMILARITY BETWEEN THE FOLLOWING EVENTS AND THOSE DESCRIBED IN IE NOTICE 84-48 AND SUPPLEMENT 1 TO THAT NOTICE.

ON 12/28/84 AT APPROXIMATELY 1300 HOURS, WITH UNIT 2 REACTOR COOLANT SYSTEM IN MODE 5 (COLD SHUTDOWN), STEM SEPARATION/CRACK INDICATIONS WERE IDENTIFIED ON REACTOR COOLANT SYSTEM (IEEE/AB) VALVES (IEEE/ISV), 2-RC-103 LOOP 1, LOOP 2, LOOP 3, LOOP 4 AND 2-RC-112 LOOP 1, LOOP 2 AND LOOP 4. THE UNIT WAS OUT OF SERVICE FOR A SCHEDULED OUTAGE AND PLANT PERSONNEL HAD PERFORMED ULTRASONIC EXAMINATIONS ON THE SUBJECT VALVES PURSUANT TO IE INFORMATION NOTICE 84-48 AND 84-48, SUPPLEMENT 1. THE ULTRASONIC EXAMINATIONS, IN CONJUNCTION WITH EARLIER RADIOGRAPHS, IDENTIFIED THE STEM INDICATIONS IN THE VALVE DISC REGION.

THE IDENTIFIED VALVES ARE ALL 2 INCH, 1500 P.S.I. GLOBE VALVES MANUFACTURED BY THE EDWARD VALVE DIVISION OF ROCKWELL MANUFACTURING COMPANY (DWG. D-464532). THE VALVES SERVE AS ISOLATION POINTS IN THE RESISTANCE TEMPERATURE DETECTOR (RTD) MANIFOLD LOOPS.

ALL SEVEN OF THE VALVES WERE REPLACED WITH 2 INCH, 1500 P.S.I. GLOBE VALVES MANUFACTURED BY CONVAL INC. (DWG. 12G2-316). IN ADDITION, FOUR OTHER RTD MANIFOLD ROCKWELL VALVES, 2-RC-102 LOOP 2, LOOP 3, LOOP 4 AND 2-RC-112 LOOP 3 WERE REPLACED WITH THE 2 INCH CONVAL DESIGN AS PART OF A PLANT PROGRAM TO REPLACE ALL OF THE ROCKWELL-EDWARD VALVES IN THE RTD MANIFOLD LOOPS.

ON 01/16/85 AT APPROXIMATELY 1300 HOURS, WITH UNIT 1 REACTOR COOLANT SYSTEM IN MODE 5 (COLD SHUTDOWN), UNIT 1 RTD MANIFOLD ISOLATION VALVES WERE INSPECTED FOR STEM SEPARATION/CRACK INDICATIONS. AGAIN, THE UNIT WAS OUT OF SERVICE FOR A SCHEDULED OUTAGE AND PLANT PERSONNEL PERFORMED ULTRASONIC EXAMINATIONS. A TOTAL OF ELEVEN VALVES WERE IDENTIFIED AS HAVING BROKEN OR CRACKED STEMS IN THE DISC ATTACHMENT REGION. THE SUBJECT VALVES WERE 1-RC-102 LOOP 1 AND LOOP 4; 1-RC-103 LOOP 1, LOOP 2, LOOP 3, AND LOOP 4; 1-RC-108 LOOP 3; 1-RC-111 LOOP 1 AND LOOP 3; 1-RC-112 LOOP 1 AND LOOP 3. ALL OF THE IDENTIFIED VALVES WERE 2 INCH ROCKWELL-EDWARD GLOBE VALVES OF THE SAME DESIGN AS FOUND ON THE UNIT 2 RTD MANIFOLDS.

FIVE OF THE ELEVEN VALVES WERE REPLACED WITH 2 INCH CONVAL GLOBE VALVES OF THE SAME DESIGN AS THOSE USED AS REPLACEMENTS IN UNIT 2. THE OTHER SIX VALVES WERE REPLACED WITH 2 INCH 1500 P.S.I. GLOBE VALVES MANUFACTURED BY KEROTEST MANUFACTURING CORP. (DWG. ML-D-21516). IN ADDITION, ONE OTHER RTD MANIFOLD ROCKWELL VALVE 1-RC-102 LOOP 2 WAS REPLACED WITH THE CONVAL STYLE VALVE AS PART OF THE PREVIOUSLY MENTIONED REPLACEMENT PROGRAM.

THERE WERE NO ADVERSE SAFETY CONSEQUENCES DUE TO THIS EVENT. THE RTD LOOP FLOWS ARE MONITORED AND ALARMED. ANNUNCIATOR RESPONSE PROCEDURES FOR LOW RTD MANIFOLD FLOW ALARMS REQUIRE THAT THE AFFECTED BISTABLES ARE PLACED IN THE "TRIP" MODE WITHIN ONE HOUR.



INDIANA & MICHIGAN ELECTRIC COMPANY

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

March 20, 1985

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

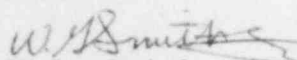
Operating License DPR-74
Docket No. 50-316

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 85-007-0

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.B. Brugger
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