

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) DONALD C. COOK, UNIT 2	DOCKET NUMBER (2) 0 5 0 0 0 3 1 6	PAGE (3) 1 OF 0 2
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TITLE (4)
SEVERE EROSION OF BODY-TO-BONNET STUDS ON RTD MANIFOLD ISOLATION VALVE

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	035	0	0	1	8			0 5 0 0 0
1	2	8	4	035	0	0	1	8			0 5 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)

OPERATING MODE (9) 3	20.402(b)	20.408(a)	80.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0 1 0 0	20.408(a)(1)(i)	20.408(a)(1)(ii)	80.73(a)(2)(v)	73.71(c)
	20.408(a)(1)(iii)	20.408(a)(1)(iv)	80.73(a)(2)(vi)	X OTHER (Specify in Abstract below and in Text, NRC Form 356A) VOLUNTARY
20.408(a)(1)(v)	20.408(a)(1)(vi)	80.73(a)(2)(vii)(A)		
20.408(a)(1)(vii)	20.408(a)(1)(viii)	80.73(a)(2)(vii)(B)	80.73(a)(2)(viii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME N. C. WILLIAMS - MAINTENANCE DEPARTMENT SUPERINTENDENT	TELEPHONE NUMBER AREA CODE 6 1 6 4 6 5 - 5 9 0 1
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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
B	A	B I S V	V	0 8 5 Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

DURING NORMAL STARTUP OPERATIONS ON 12/24/84, WITH UNIT 2 REACTOR COOLANT SYSTEM IN MODE 3 (HOT STANDBY), A CONTAINMENT INSPECTION REVEALED THAT VALVE 2-RC-107 LOOP 4 HAD A BODY-TO-BONNET LEAK. 2-RC-107 IS A 3 INCH VELAN GATE VALVE AND IS THE DOWNSTREAM ISOLATION FOR THE REACTOR COOLANT LOOP 4 RESISTANCE TEMPERATURE DETECTOR MANIFOLD. THE UNIT WAS RETURNED TO MODE 5 (COLD SHUTDOWN) AND THE VALVE DISASSEMBLED FOR INSPECTION AND REPAIR. DURING DISASSEMBLY IT WAS DISCOVERED THAT THE CARBON STEEL BODY-TO-BONNET STUDS WERE SEVERELY WASTED DUE TO CORROSIVE EROSION. A NEW BONNET GASKET AND NEW CARBON STEEL STUDS WERE INSTALLED. THREE SIMILAR VALVES WERE INSPECTED AN NO DEFICIENCIES WERE NOTED.

THE CARBON STEEL STUDS AND NUTS ON 2-RC-107 IN LOOPS ONE THROUGH FOUR WILL BE REPLACED WITH STAINLESS STEEL STUDS AND NUTS UNDER DESIGN CHANGE 12-2718 DURING THE NEXT REFUELING OUTAGE.

THIS LER IS BEING SUBMITTED DUE TO THE SIMILARITY BETWEEN THIS EVENT AND THOSE DESCRIBED ON IE BULLETIN 82-02.

Lead
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PDR ADDCK 05000316
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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) D. C. COOK, UNIT 2	DOCKET NUMBER (2) 0 5 0 0 0 3 1 6	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 4	- 0 3 5	- 0 0	0 2	OF	0 2

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

ON 12/24/84 AT APPROXIMATELY 1400 HOURS, WITH UNIT 2 REACTOR COOLANT SYSTEM IN MODE 3 (HOT STANDBY), BODY-TO-BONNET LEAKAGE WAS IDENTIFIED ON REACTOR COOLANT SYSTEM (AB) VALVE 2-RC-107 LOOP 4 (ISV). UNIT 2 WAS BEING RETURNED TO SERVICE AFTER A SCHEDULED OUTAGE AND OPERATIONS PERSONNEL WERE CONDUCTING A CONTAINMENT INSPECTION DURING WHICH THE LEAK WAS DISCOVERED. THE UNIT WAS RETURNED TO MODE 5 (COLD SHUTDOWN) AND REPAIRS INITIATED.

VALVE 2-RC-107 LOOP 4 IS A 3 INCH, 1500 P.S.I. GATE VALVE, MODEL B10-3548-13M, MANUFACTURED BY VELAN CORPORATION (VENDOR DWG. 8843-016 REV. A). THIS VALVE IS THE DOWNSTREAM ISOLATION FOR THE LOOP FOUR RESISTANCE TEMPERATURE DETECTOR MANIFOLD. DURING DISASSEMBLY OF THE VALVE IT WAS DISCOVERED THAT ALL 12 CARBON STEEL BODY-TO-BONNET STUDS WERE SEVERELY WASTED DUE TO CORROSIVE EROSION. TWO STUDS BROKE IN HALF DURING REMOVAL. THE CONDITION OF THE STUDS IS ATTRIBUTED TO EXTENDED CONTACT WITH BORATED WATER AND STEAM. ALL 12 STUDS WERE REPLACED WITH NEW CARBON STEEL STUDS AND A NEW BONNET GASKET WAS INSTALLED. THREE SIMILAR VALVES, 2-RC-107 LOOP 1, LOOP 2 AND LOOP 3, WERE INSPECTED AND NO EVIDENCE OF CORROSION OR LEAKAGE WAS FOUND. AT 1215 HOURS ON 12/27/84 UNIT STARTUP WAS REINITIATED AND VALVE 2-RC-107 LOOP 4 WAS INSPECTED AT SYSTEM TEMPERATURE AND PRESSURE. NO INDICATIONS OF LEAKAGE WERE FOUND.

FOUR SIMILAR VALVES IN UNIT 1, 1-RC-107 LOOP 1, LOOP 2, LOOP 3 AND LOOP 4 WERE INSPECTED AND NO INDICATIONS OF LEAKAGE WERE FOUND.

THE CARBON STEEL STUDS AND NUTS OF ALL FOUR 2-RC-107 VALVES WILL BE REPLACED WITH STAINLESS STEEL STUDS AND NUTS THROUGH IMPLEMENTATION OF DESIGN CHANGE RFC 12-2718. THIS WORK IS CURRENTLY PLANNED FOR THE NEXT REFUELING OUTAGE.

THIS LER IS BEING SUBMITTED DUE TO THE SIMILARITY BETWEEN THIS EVENT AND THOSE DESCRIBED ON IE BULLETIN 82-02.



INDIANA & MICHIGAN ELECTRIC COMPANY

DONALD C. COOK NUCLEAR PLANT
P.O. Box 458, Bridgman, Michigan 49106
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January 24, 1985

United States Nuclear Regulatory Commission
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Washington, D.C. 20555

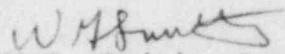
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Docket No. 50-316

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 84-035-0

Sincerely,


W.G. Smith, Jr.
Plant Manager

/cbm

Attachment

cc: John E. Dolan
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