

LICENSEE EVENT REPORT

CONTROL BLOCK:

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 (1)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	M	I	D	C	C	2	2	0	0	0	0	0	0	0	0	0	0	3	4	1	1	1	1	4			5		
7	8	LICENSEE CODE						14	15	LICENSE NUMBER										25	26	LICENSE TYPE					30	57	CAT	58

CON'T

0 1 7 8 REPORT SOURCE L 6 0 5 0 0 0 3 1 6 7 0 4 0 1 8 2 8 0 4 1 2 8 2 9 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

ON APRIL 1, 1982, AN UNPLANNED GAS RELEASE WAS DETECTED BY AN ELEVATED UNIT 2 VENT
STACK GASEOUS MONITOR (R-26) READING. THIS EVENT CONTINUED FOR SEVERAL DAYS WITH
LOW LEVEL GASEOUS RELEASES BEING DETECTED BY BOTH R-26 IN UNIT 1 AND UNIT 2. DURING
THIS TIME PERIOD, A TOTAL OF 118.0 Ci WERE RELEASED AT A RATE OF 2.23 E-4 Ci/Sec.,
WHICH IS 0.382% OF THE TECH. SPEC. LIMIT. THE MAXIMUM RELEASE RATE WAS 2.23 E-3
Ci/Sec., WHICH IS 3.78% OF THE TECH. SPEC. LIMIT. THIS RELEASE OCCURRED WITHOUT THE
SAMPLING AND ANALYTICAL REQUIREMENTS OF TECH. SPEC., APPENDIX B, 2.4.4.E.

SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP SUBCODE		VALVE SUBCODE	
M A		E		B		V A L V E X				D		P	
9 10		11 12		13 14		15 16 17 18				19 20		21 22	
LER/RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.			
17		8 2		0 1 9		0 4		T		0			
21 22		23 24		25 26		27 28		29 30		31 32			
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.	
A		Z		Z		Z		0 0 0 0		Y		Y	
18 19		20 21		22 23		24 25		26 27		28 29		30 31	
32 33		34 35		36 37		38 39		40 41		42 43		44 45	
PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER											
N		G 2 5 5											
46 47		48 49		50 51		52 53		54 55		56 57		58 59	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 2 INITIAL INVESTIGATION REVEALED THAT A SMALL LEAK WAS OCCURRING FROM THE SEAL ON UNIT 2
1 1 EAST CENTRIFUGAL CHARGING PUMP. PUMP ISOLATION REDUCED THE RELEASE RATE BUT DID NOT
1 2 RETURN THE R-26 READINGS TO NORMAL BACKGROUND. ON APRIL 7, 1982, THE UNIT 2 REACTOR
1 3 COOLANT FILTER WAS REMOVED FROM SERVICE FOR A ROUTINE FILTER CHANGE. AT THIS TIME
1 4 BOTH R-26 MONITORS RETURNED TO NORMAL BACKGROUND. (SEE ATTACHED SUPPLEMENT)

FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION				
1	5	C	28	0	9	9	29	NA	A	31	RADIATION MONITORING ALARM	32

ACTIVITY		CONTENT		RELEASED		OF RELEASE		AMOUNT OF ACTIVITY		LOCATION OF RELEASE	
1	G	G	33	N	34	118.0 Ci Xe-133	35	AUXILIARY BUILDING VENT TO ATMOSPHERE	36		
7	8	9	10	11	12	13	14	15	16	17	

PERSONNEL EXPOSURES									
NUMBER			TYPE	DESCRIPTION					
1	7	0	0	0	(37)	Z	(38)	NA	(39)

PERSONNEL INJURIES
NUMBER DESCRIPTION

	1	2	3	4	5	6	7	8	9	0	DESCRIPTION
1	0	0	0	(4)	0						NA

7		8		9		10		11		12		
LOSS OF OR DAMAGE TO FACILITY						(43)						
TYPE		DESCRIPTION										
1	0	Z	(42)	NA								80

PUBLICITY		ISSUED		DESCRIPTION		NRC USE ONLY	
2	0	N	(44)	NA			

8204200050 820412
PDR ADOCK 05000316
S PDR

A. PALMER

PHONE: 616-465-5901

NRC USE ONLY

100

SUPPLEMENT TO CAUSE DESCRIPTION

ON APRIL 1, 1982 AT 2100 HOURS, UNIT 2 VENT STACK GASEOUS MONITOR (2-R/26) INCREASED RAPIDLY. INVESTIGATION IDENTIFIED A SMALL LEAK ON THE UNIT 2 EAST CENTRIFUGAL CHARGING PUMP SEAL. THE PUMP WAS ISOLATED AT 1900 HOURS ON APRIL 2. AT THIS TIME THE GASEOUS RELEASE RATE DECREASED AS SEEN ON 2-R/26 BUT DID NOT CAUSE THE MONITOR TO RETURN TO ITS NORMAL BACKGROUND.

INVESTIGATION CONTINUED BY CHECKING ALL LIQUID DRAIN VALVES. THIS WAS DONE BECAUSE THE LIQUID OFF-GAS MONITOR (R/22) WAS PERIODICALLY INDICATING HIGH RADIOGAS ACTIVITIES IN THE WASTE HOLDUP TANKS AND SUMP TANKS.

ON APRIL 7, 1982 AT 0855 HOURS, THE UNIT 2 REACTOR COOLANT FILTER WAS ISOLATED TO CHANGE THE FILTER CARTRIDGE. SHORTLY AFTER THE FILTER WAS ISOLATED R/22 AND R/26 IN BOTH UNITS RETURNED TO NORMAL BACKGROUND. AFTER THE FILTER WAS REPLACED AND RETURNED TO SERVICE GASEOUS ACTIVITIES AT R/22 AND R/26 IN BOTH UNITS AGAIN WERE ELEVATED. THE FILTER WAS AGAIN ISOLATED AND ALL MONITORS RETURNED TO NORMAL.

EXAMINATION AT THE UNIT 2 REACTOR COOLANT FILTER DRAIN VALVE (2-CS-381) SHOWED THAT THE VALVE STEM HAD BEEN TWISTED AND THE DIAPHRAM WAS TORN. THIS CAUSED LIQUID TO LEAK PAST THE VALVE SEAT TO THE CLEAN SUMP TANK AND ALSO TO ATMOSPHERE AT THE FILTER. THESE LEAKS CREATED RADIOGASEOUS ACTIVITY AT R/26 IN BOTH UNITS AND R/22.

VALVE 2-CS-381 IS SUSPECTED OF HAVING BEEN DAMAGED ON A PREVIOUS FILTER CHANGE WHICH TOOK PLACE ON MARCH 30, 1982.

VALVE 2-CS-381 HAD BEEN CHECKED TO BE IN THE CLOSED POSITION EARLIER IN THE INVESTIGATION BY INSURING THAT THE REACH ROD FOR THE VALVE WAS NOT PARTIALLY OPEN. THIS TYPE OF CHECK WOULD NOT HAVE IDENTIFIED THAT THE VALVE HAD FAILED; THEREFORE, THE FAILURE REMAINED UNDETECTED UNTIL THE FILTER WAS REMOVED FROM SERVICE. DISASSEMBLY OF THE VALVE CONFIRMED THE FAILURE.

SUPPLEMENT TO CAUSE DESCRIPTION (Continued)

THE TOTAL RELEASE DURING THIS TIME PERIOD FROM BOTH SOURCES: THE 2-EAST CENTRIFUGAL CHARGING PUMP AS WELL AS THE REACTOR COOLANT FILTER DRAIN VALVE FAILURE WAS:

TOTAL	1.18 E 2	Ci of Xe-133
	2.28 E-4	Ci/Sec
	3.82 E-1	% Technical Specification

THE MAXIMUM RELEASE RATE DURING THIS PERIOD WAS:

	2.25 E-3	Ci/Sec
	3.78 E 0	% Technical Specification